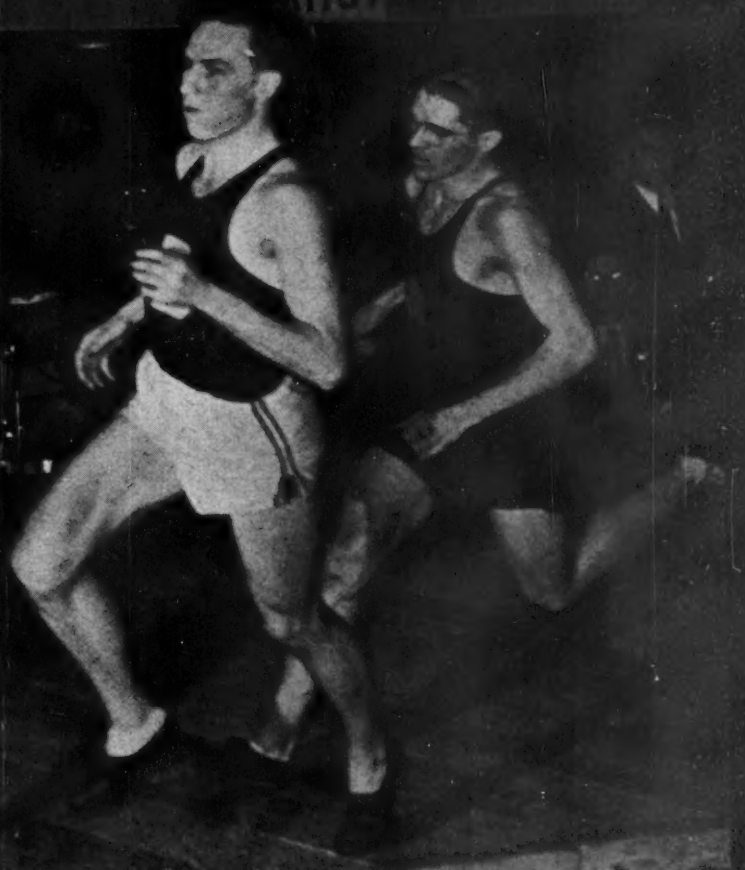
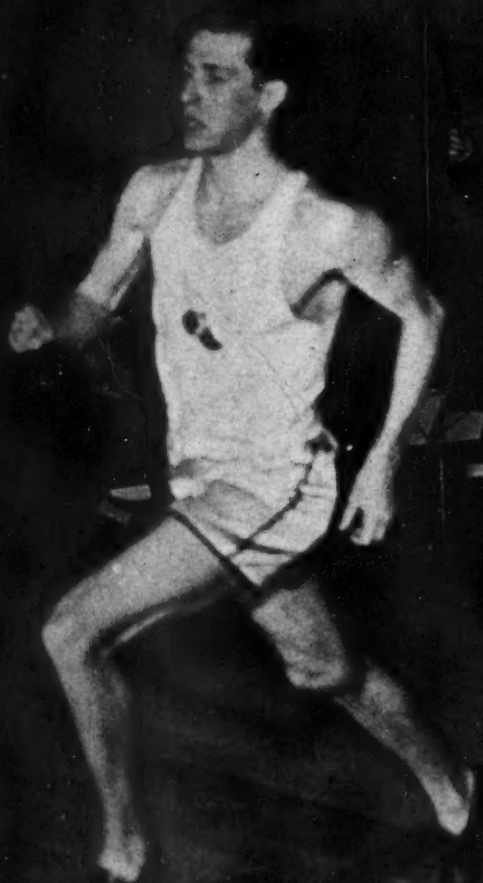


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EXIT 97





PASS THE BALL

THE signs of Victory are clear. Our enemies are on the run. The final Victory may not come tomorrow or the day after. But that it will come is inevitable. It is being forged by teamwork—teamwork among the Allies and teamwork among the crews of every piece of fighting equipment.

We know all about teamwork. We were weaned on it in our athletics. Our sports and games call for effort, for endurance, for mental and physical persistence, for a fine coordination of mind and muscle toward an end not easily attained. We make the goal hard to reach; we set up obstacles; we create resistance. But the predominant characteristic of our sports is their

competitive nature. We deliberately court the challenge of other men's skill, courage, intelligence and determination.

We insist on competition and contest. Out of this we have learned the true meaning of the word teamwork. To win, a team must pull together—pool their best individual efforts. The lesson is well learned in sports like football, basketball, baseball, and, as shown here, volleyball. The point-winning spike is the end object of the game. But before the spiker can go into action, the ball must be brought from the back line and set up by his teammates. How much different is this type of teamwork from that of the highly specialized gun crew?

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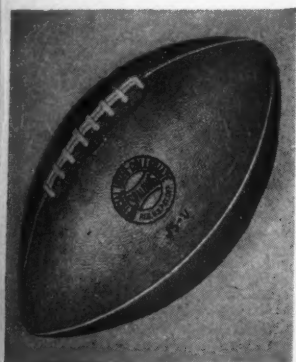
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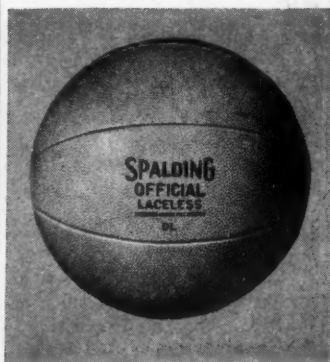
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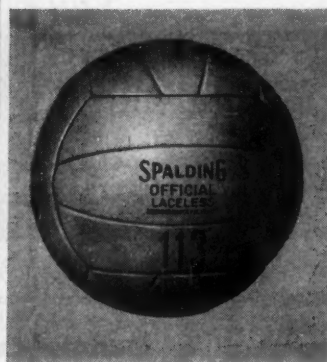
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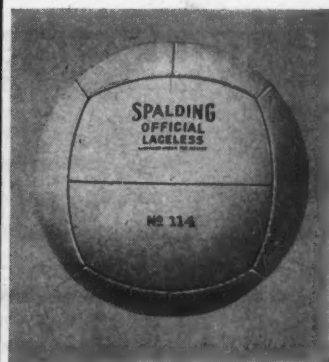
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Coming!! THIS SPRING,
A NEW KEDS BULLETIN
ON SOFTBALL

IMPLEMENTING our good-neighbor policy has put many a gray hair in the heads of our harassed politicians. In the best traditions of U. S. diplomacy, they've been sending everything but our surplus jo-jo crops to our Latin-America neighbors. All of which has been very diplomatic, indeed, and has not gone unappreciated.

However, there's one excellent potential for international rapport that they've never thoroughly explored—and that is sports. The Olympic Games immediately come to mind, and you may well argue that they provided scanty nourishment for the birds of love and peace. But the setup of the Games was never wholesome in an educational sense. At best, they were little more than glorified track meets.

For documentary evidence of the possibilities of sports, we offer the absorbing article that appeared recently in the *Christian Science Monitor*:

GRIDIRON GOOD NEIGHBOR

By Sydney A. Clark

IN THE Autumn of 1941, and again this past fall and winter, I was thrown into close contact in Mexico City with a college classmate, Coach Bernard A. (Bud) Hoban, who was and is coaching the football team of Mexico University. Through him I have become convinced that sport in Latin lands is not only our good neighbor but our Best Neighbor.

Anyone who examines the facts will quickly realize that sports is the axiomatic enemy of all that goes to make the spirit of fascism. Mussolini, in his heyday, could not bear the thought of one of his teams, in any sport, losing to another under foreign colors. He was instantly outraged and the game became an international incident, leading to riots and strained relations. In his own personal efforts to be a champion on the tennis court he reached a peak of absurdity (with frightened opponents and "fixed" umpires) that made the free sporting world laugh.

Then Hitler came along in the same mold and made such a travesty of the 1936 Olympics in Berlin that close-up movie views of Hitler at the Olympics were never shown in any part of the United States, but I saw them, in an hour-length show, in Helsinki in 1939. Never for a moment did he enjoy the sport. He suffered through it, in agony lest a decadent foreigner, or even a non-Aryan, should surpass one of his own blond Nordics and thus cast shame upon the Master Race.

The obverse of this medal of depravity is the gleaming spirit of honest competition which is a basic

source of strength to the United Nations. Its power in Mexico is great and growing. In 1941 I saw and heard seven thousand persons cheer themselves hoarse at a football game between the University of Mexico and the Politécnico of the same city. In 1943, twelve thousand persons attended the same and other games. In 1944 I have listened in while my friend "el coach" talked in halting but effective Spanish to a group of Mexican football coaches who would not let him go for more than two hours. When finally he "escaped" with me, the coaches lingered on and on, still arguing about the fine points in "futbol."

These Mexican boys play excellent football. In spite of the lack of background and training, the Mexican teams play a rugged, fast game. Against Randolph Field, Texas, a Cotton Bowl competitor, the University of Mexico, outweighed 28 pounds to a man, made an excellent showing, as half-a-dozen witnesses have reported to me.

Over 7,000 boys are now playing football in Mexico, most of them ill-equipped but all of them enthusiastic. These boys are the future leaders of Mexico. The more we can foster their love for this great game and the oftener we can arrange for inter-American contests, the sooner will complete understanding and mutual respect develop.

I would say that the Mexican football players whom I have seen in action and have met socially show no trace of truculence nor of animosity toward the Colossus of the North (tiresome phrase), nor anything but sheer good will and eagerness for better sport.

If the United States, not in any spirit of patronage but to help Allied devotees of what is to them a very new field and conception of sport, were to lend-lease a few hundred football uniforms, complete with headgear, to Mexican youth, it would do more good—I am convinced—than do most "ambassadors of good will" or even some forms of technical aid.

These football lads have their coteries of smaller lads who idolize them and follow in their steps. The circle spreads with subtle and potent force. The central idea of it—unalterable fairness in combat—is a mounting tower of friendly strength. It is our Best Neighbor in Latin lands.

DRIVE a critic of interscholastic sports into a corner and he will always come up with his Sunday punch—the argument that inter-

school sports are undesirable because they reach so few boys.

We all know the counter, of course. Under a proper educational setup, an intramural program accommodates the sports needs of the great mass of students, while the interscholastic program furnishes a wholesome outlet for the sports gifted.

But why, we wonder, is it necessary to counter at all? Why does everybody grant the validity of the original premise—that interscholastic sports reach only a few boys? Are there any comprehensive statistics that prove it? What is the statistical definition of that word "few," anyway?

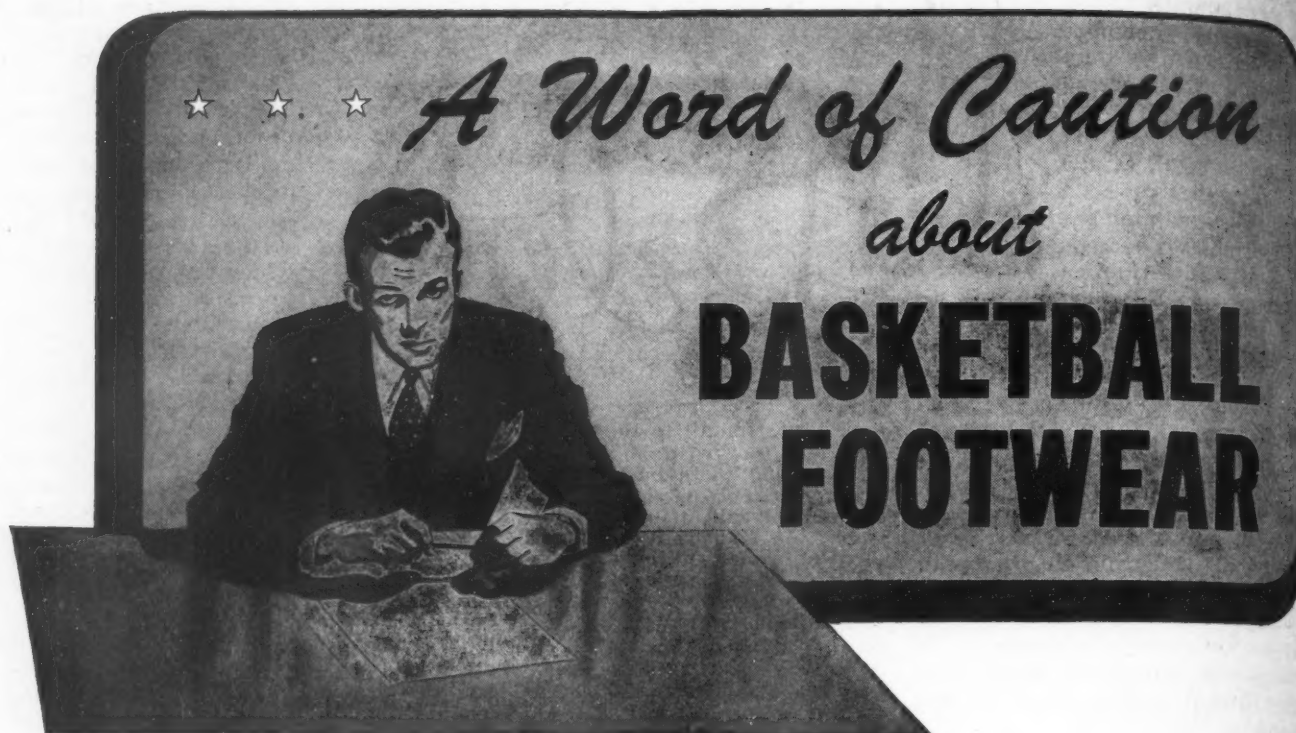
In a piece titled, "Athletics for All," in February's *School Activities*, Julian W. Smith, the director of athletics of the Michigan High School Athletic Association, gives the premise a thorough pummeling. He points out that in Michigan there are about 725 high schools. Approximately 8% have an enrollment of 800 or more; 12%, 325-799; 40%, 125-324; and 40% less than 125.

In the few large schools it is true that only a small proportion of the boys participate on varsity squads. But in 60% of the schools, the squads represent 25 to 75% of all the boys! This doesn't take into consideration the countless number of boys who, in sand lots, back yards, etc., practice and play in anticipation of making the varsity or because they are inspired by the high school program. The fact that every student cannot play on the first team is hardly an indictment of all athletics.

MR. SMITH also points out another argument that has been used against interscholastic sports—that most of the participants are spectators. It is true that on the day of the game, more watch than play. However, most of the student audience have their own favorite sport in which there is participation for all.

No great crowds may watch them participate, but certainly that does not depreciate the value to the individual. There is something rather fine about the golfer, the bowler, the swimmer, the runner, and many others watching the footballer, for example. In fact, there is much to be said for the mental and physical values in spectatorship.

Here Below



AS THE 1943-1944 basketball season draws to a close, basketball coaches, managers and players should be cautioned that the outlook for additional basketball footwear this coming Fall is extremely uncertain.

We anticipate that *some* basketball shoes will be available for the new season. Obviously, however, the needs of our armed forces take precedence . . . and as the situation stands now, it is questionable that any substantial surplus for *civilian* use will be available. Of course, Converse will exert every effort to obtain maximum canvas footwear production, within the limits of

civilian quotas. But manpower shortages, processing difficulties and current war contracts are all factors that bear upon any manufacturer's ability to produce for civilian needs.

Therefore, this word of caution to the basketball fraternity: At season's end, treat your present basketball footwear as though it were worth its weight in gold. Clean all shoes thoroughly; repair rips or tears in the canvas uppers; store the shoes in a cool, dry place, after stuffing them with paper. And don't let anyone use them for ordinary gym use or outdoor exercises. Keep your basketball shoes *for* basketball!

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THE SCHOOLBOY PITCHER

by Dave Tobey

Although Dave Tobey is more widely known as a basketball official and coach, he is also a baseball coach of considerable distinction, having coached the sport at three high schools and a college—the Savage School for Physical Education. Among his more distinguished proteges are two big-league pitchers, Xavier Rescigno and Wally Signor.

THE schoolboy coach doesn't live who wouldn't swap two infielders, an outfielder and a half-dozen Louisville sluggers for a first rate pitcher. Even in the majors, pitching is at least 50 percent of a team's strength. In high school and college ball, the estimate ranges anywhere from 75 to 90 percent. So it will behoove a coach to work hard with his would-be Chandlers.

Minor miracles may be worked with strong-armed adolescents. Many a second-rate infielder or outfielder has been converted into

cautions such as lighting, spacing, nets, etc.

If the gym is unavailable, it may be worthwhile to go outdoors in early fall, when at least six weeks practice are possible. At this time the pitchers may be taught the proper stance, wind-up and pivot; and fielding, backing up bases and other fundamentals.

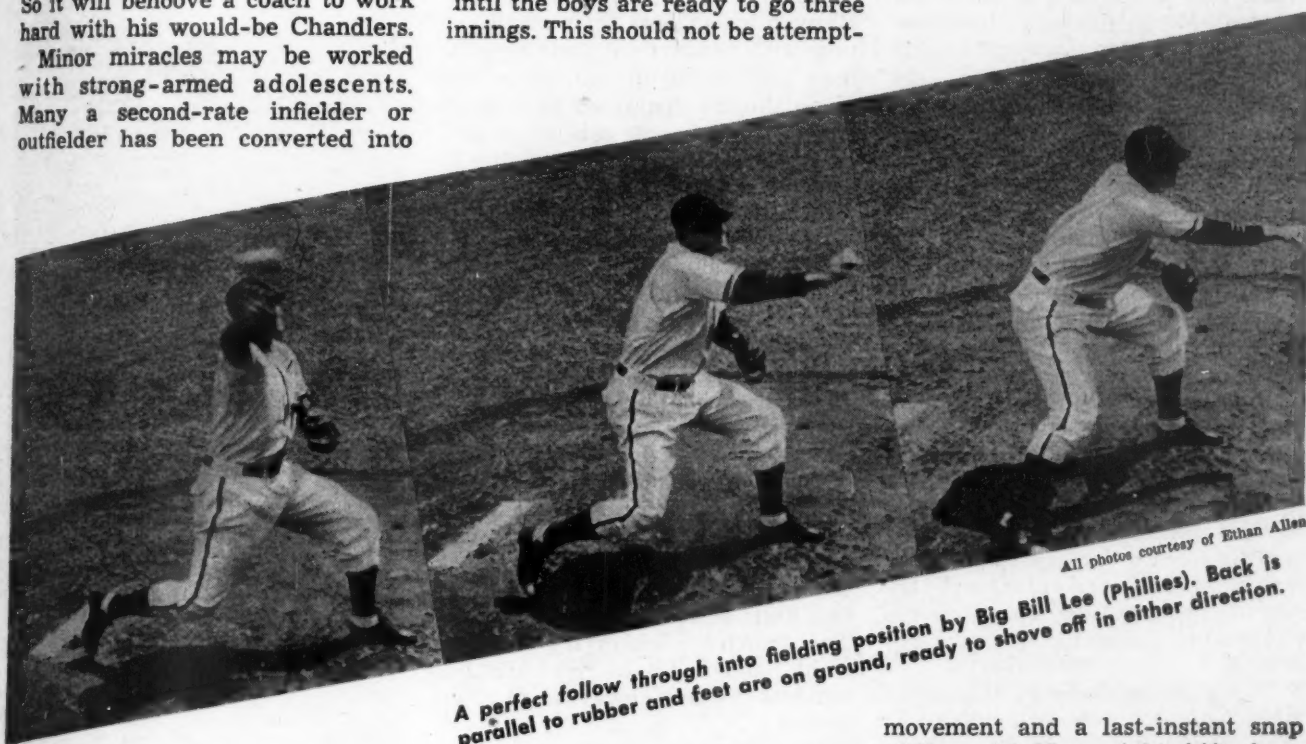
Once the regular pre-season drills are instituted, moderate, progressive conditioning is essential. To avoid sore arms, the boys should be cautioned against throwing curves and all-out fast balls too soon.

Start slowly, adding practice time until the boys are ready to go three innings. This should not be attempt-

the back foot, the body straightened and the arms swung up past the hips and joined over-head. The hands come up in front of the face with the ball well covered by the glove.

Continuing this pendulum motion, the body pivots on the right foot and turns to the right. This turn is taken prior to the down-and-back action of the throwing arm. The arm then goes back and the left leg is raised high.

The entire body is now ready to be put behind the pitch. The actual delivery is made with a loose, easy



All photos courtesy of Ethan Allen
A perfect follow through into fielding position by Big Bill Lee (Phillies). Back is parallel to rubber and feet are on ground, ready to shove off in either direction.

a steady winner. In sifting your squad for potential pitchers, however, make sure that the boy has a good arm to begin with. Don't waste your time on a weak-armed prospect, unless, of course, he has lots of "stuff" or you have no other alternative.

Make sure to devote sufficient time to individual instruction. Many high school pitchers are never taught how to stand on the rubber or acquainted with the balk rules. The remedy for this is skull practice and basic training drills.

It is a good idea to call for battery candidates several weeks before the regular call. This means using the gym which, in turn, necessitates considerable safety pre-

pared for at least three weeks. Gradually the pitcher will develop the stamina to go a full game. In practice, the game situations should be set up and the pitcher taught what to do in each case.

Stance and Wind-Up (right handers). With none on, with bases full or with runners on second and third, a full windup may be used. In this stance, the right foot toes the rubber at about a 45 degree angle to the right to facilitate the pivot. The left foot may be placed on the back edge of the rubber or directly behind it.

In winding up, the weight is shifted to the front foot, the trunk bent forward and the arms swung back. Then the weight is shifted to

movement and a last-instant snap of the wrist. The weight shifts from the back to the front foot and the arm follows through. The pitcher should finish with both feet on the ground and the back parallel to the rubber, facing the batter in readiness for a fielding play.

From beginning to end, the eyes never leave the catcher. Many—too many—boys take their eyes off the plate in the wind-up or body turn. This is a bad fault, one of those insidious reasons for poor control. Watch for it.

The boy should hold his fielding position until the catcher returns the ball. Many beginners have a bad habit of walking in after every pitch. This is a senseless waste of shoe leather and energy.

Pitchers vary in the matter of

windups. Some like to take two back circles, while others prefer the half circle described. Some boys cleverly screen their stuff by swinging the gloved hand forward prior to the release. A common mistake just before the windup is to raise the pivot foot and then return it to the rubber. This is an illegal delivery.

The pitcher should take his sign from the catcher before stepping on the rubber. After the release, he should take the return, step back, take his sign and go to it again.

Sideward Stance: With runners on first, first and second, or first and third, the sideward stance is used. The right foot is placed on the rubber so that the front spike is just over the front edge. The left foot is placed 18 to 24 inches in front of the rubber.

The toes are angled at about 45 degrees. Many pitchers, however, angle the front toe more toward the plate (right-handers toward the third base side of the plate and southpaws toward the first-base side).

All the weight is on the back or pitching foot. The hands are together over the stomach, with the pitching hand holding the ball in the glove. No windup is taken. The arms are stretched overhead, then brought back to the rest position. Once the hands have made contact, another stretch is forbidden. The hands may not be separated unless for a pitch, a pick-off throw, or a step back off the rubber.

Throw to Bases: With a runner on first, the left shoulder is turned slightly toward the bag. The pitcher watches the runner out of the corner of his eye. If he can't see the runner, the latter has too much of a lead.

To make the throw, pivot on the right foot, step quickly toward first with the left and make a snap throw, aiming at the baseman's right knee; the low outside throw facilitates the tag.

Vary the manner of throwing; a slow throw followed quickly by a fast one may catch the runner napping. Another stunt is to throw to first immediately upon receiving the ball from the catcher. Be sure the first baseman is ready for the play. A sign-and-acknowledgment arrangement is desirable.

With a runner on second, stand with the back foot resting from heel to toe on the front edge of the rubber, with the shoulders almost on a direct line with the plate and second. To pick off the runner, pivot on the back foot and make a half turn and step toward the base with

the front foot. (A right hander pivots to the left.) The pitcher may fake the throw but he must step to avoid balking.

Learning to back off the rubber, to fake throws, to hold the runners close, and what to do in a delayed steal situation does not come naturally — it must be taught. The pitcher must learn to throw to the side of the bag nearest the runner—low on tag plays and chest high on force or double plays. If there is ample time for the throw, the pitcher can give the baseman a chance to cover. If a quick throw is necessary, he should arc the ball so that it reaches the bag with the baseman.

Pitching from the sideward position requires much practice. More bases are stolen on the pitcher than on the catcher, who has little chance to nab a runner with a long lead. Many pitchers lose their effectiveness with runners on; some because they can't wind up and others because they're distracted by teasing tactics. Considerable practice is necessary on pivoting and throwing to each base after the stretch.

A pitcher should throw all his stuff with the same motion. He should catalogue the opponents' weaknesses. If he has no line on the team, he may be guided by the batter's stance or swing, and the batting order. He should know that 1 and 2 are usually fast; 3, 4 and 5 the best hitters; and that the weak hitters, if any, bring up the rear.

The idea is to make as few pitches as possible, at the same time keeping ahead of the batter. This will give the pitcher margin to "work on"—to make the batter fish for bad balls or to hit at his best ball. The smarter pitchers try to make right handers hit to right and left handers to left—away from their power.

Here are some pointers:

Late swinger, batter using end grip or too heavy a bat—deliver speed or curve, aiming at bat handle.

Choked grip—curve ball out of reach or high inside.

Bucket stepper—aim fast ball or curve over outside corner.

Short stride—keep ball low.

Long stride—high on inside or slow curve.

Cocking foot (that is, raising forward knee too high)—change of pace, low slow ball.

Shoulder dip—high ball.

Stance too far from plate—speed and curves aimed at the plate.

Stance too close—pitch to inside aiming at handle, throw curve right at batter.

SCHOLASTIC COACH

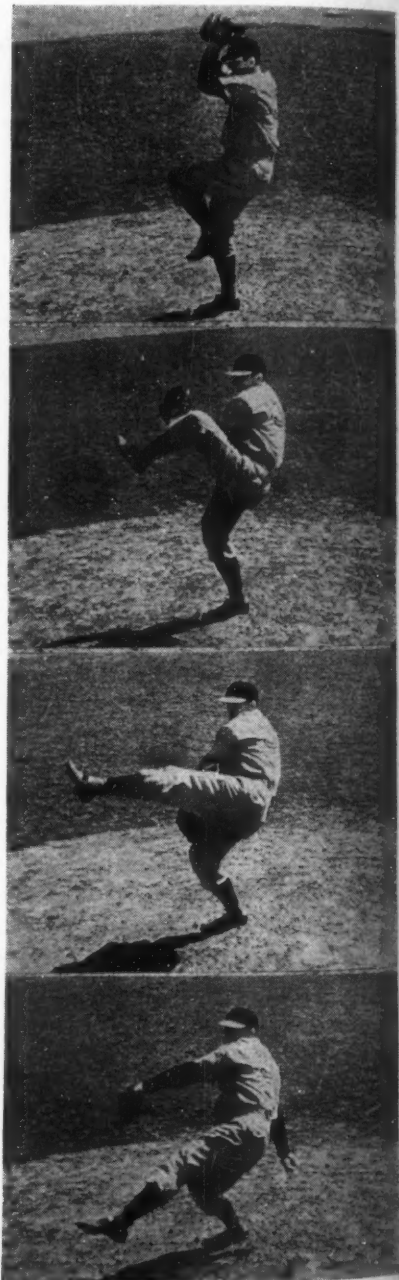
Expected bunt—keep ball high for pop-up, but be sure not to lose batter on a walk.

Force at third—keep ball outside for left-hander, inside for right-hander. This will enable you to edge over to third-base side.

Over-anxious batter—stall, take time, try to make him go for bad balls.

Fielding: Practice fielding bunts. Ability to wheel, pivot or shift the feet for throw comes with concentrated practice. Let the infielders take high flies. Listen to the catcher's call on weak taps or bunts.

PAUL DERRINGER, of the Cubs, one of the best curve ballers in National League history, masks his delivery with a clever little trick. He lifts his front leg way up and lowers both hands behind it in the crotch (third picture).



Many high school coaches prefer the pitcher to cut off throws. The writer, however, favors major league methods—letting the infielders do the cutting off and the pitcher backing up the bases.

The pitcher covers first on all infield hits to his left, as the first baseman is often drawn off the bag. He should practice the first-baseman-to-pitcher putout. This is a lob throw which the pitcher should receive at least two steps from the base so that he may avoid injury by touching the bag and stopping or, if time permits, clearing out.

In backing up bases, the pitcher should get about 20 feet behind the bag. These rules apply:

1. Back up third on hits to outfield, runner on first.
2. Back up home on hits to outfield, runner on second.
3. Cover home on passed balls and foul flies that draw off the catcher.
4. Check first or third whenever the play indicates coverage.

If the shuttle system of running down trapped runners is not used, it may be wise to have the pitcher definitely cover first on a run-down between first and second; third on a run down between second and third; and home on a run down between third and home.

The Warm-Up: The pitcher should warm up from 10 to 15 minutes, starting with easy throws and gradually adding speed. After the first few minutes, he may try a curve. The last seven or eight pitches should be the testers. He should also throw at least three warm-up pitches at the start of each inning.

Tips on judgment and strategy for all situations follow:

1. Don't work too fast; annoy anxious batters by stalling. This may take the form of a slight delay in delivery or of several pick-off throws to the bases.
2. Make sure teammates are in position before pitching, and that they are properly set for certain pitches.
3. Try to get ahead of the batter. Sneak the first pitch over if the batters are not taking it.
4. Pitch outside curves and change pace against good hitters; don't groove the ball.
5. Pitch to batters' weaknesses; your outfield plays to their strength.
6. Be alert in regard to the batting order (know who is up—1, 2, 3, etc.).
7. Don't walk weak hitters; bear down on 3, 4 and 5.
8. Bear down with men on base.
9. Keep the tying and winning runs off base.

10. Never throw a slow ball to weak hitters or with a runner on first when situation calls for a steal.

11. Keep ball around the knees in double-play situation or with runners in scoring position (forcing batter to hit into the dirt).

12. Where situation calls for a squeeze play, keep the ball high. Watch runner on third for any give-away.

13. When ahead of the batter, two and nothing, or on an expected steal, waste a pitch, maybe two. Anticipate offensive tactics.

14. Intentional walk. Sometimes it pays to walk a man deliberately—to set up a force or maybe to get at a weak batter in a crucial moment. However, never put the tying or winning runs on base unless the coach gives orders to bypass a noted slugger.

15. In some situations with the tying or winning run on third, it may be advisable to walk one or even two batters to get at a weak hitter or to set up a double play.

16. With bases full, runners in a force situation, and three and two on the batter, it is wise to avoid a wind-up; take the sideward stance position; the pause between the stretch and the delivery may catch an impatient runner.

17. Take an extra windup against a batter with foot faults. The change from one back circle to two and back again will throw him off. Keep him guessing.

18. Have a pick-off sign with your second baseman and shortstop.

19. Don't lose the batter because a runner on third keeps coming down on every pitch.

20. Don't shake off the catcher too often. If you have no confidence in him, get someone else to handle you. You must have confidence in the man behind the plate.

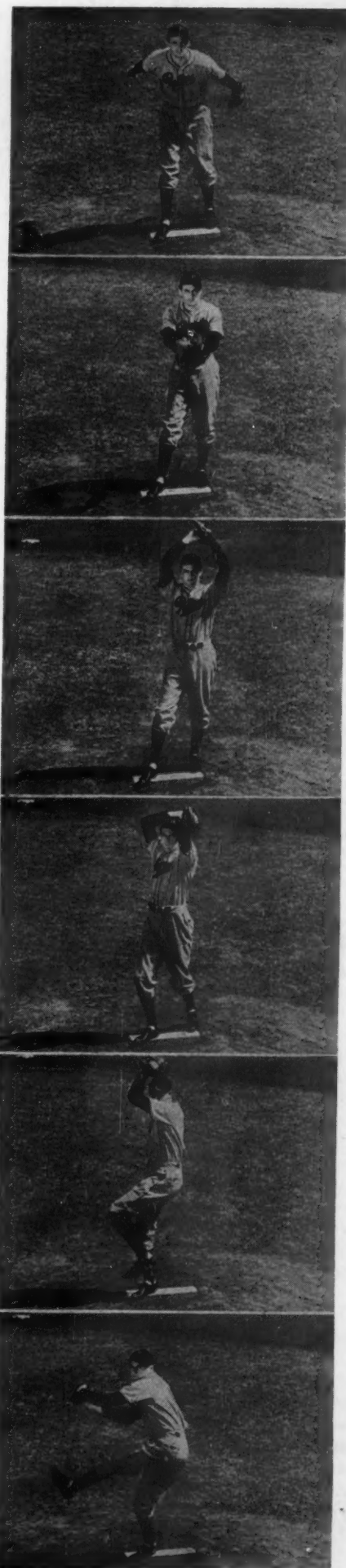
21. Don't repeat a wrong pitch to the batter.

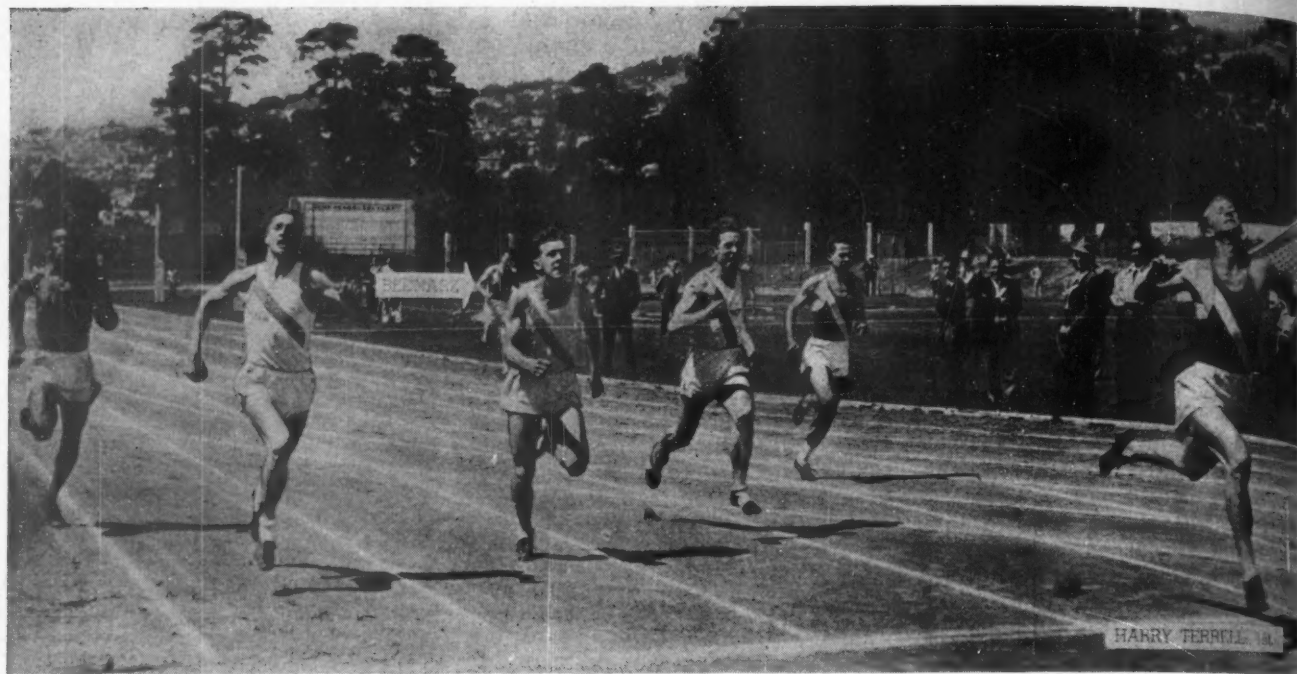
22. Don't throw the ball to a coacher. It's an old trick, asking to see the ball but not calling time out. The runners may advance on your throw which, of course, the coacher will let roll.

23. Pay no attention to jockeying.

24. Learn to pace yourself so that you will have something left for the crucial last innings.

HUGH MULCAHY, the Phillies' ace side-armed who's been doing all his recent pitching for Uncle Sam, uses the conventional half-circle windup. His arms swing back, forward and up, while his weight shifts to the back foot. A pivot on the right foot brings his body around sideward to the plate, where the front leg is lifted and the ball brought back.





OAKLAND'S MODEL TRACK AND FIELD MEET

by David P. Snyder

Coaches who have wondered over or attempted to analyze the omnipotency of California track will read with interest—and a great deal of profit—David P. Snyder's splendid pandect on the unique Oakland, Cal., high school track program. Mr. Snyder, who is supervisor of physical education and recreation in the public schools, details a meet program that is a paragon of organizational efficiency, good educational practice and all-around attractiveness.

MANY reasons have been advanced for the superlative quality of California track and field. Some attribute it to the brand of college coaching. Others point out the superiority of equipment and facilities. And always there is the argument that the equable climate permits outdoor practice nearly all-year round.

All these are valid points, but neither individually nor collectively do they present the entire and true picture. The success of California track stems from the high schools and the type of track and field program they offer.

Most of the 350 senior highs in the state were planned and built after World War I. At that time, California passed a compulsory physical education law which, briefly and in part, stipulated that each boy and girl from the ninth through the twelfth grade must participate in physical education activities at least 200 minutes a week. The law also provided for a state director to guide the program.

As a result, for more than 20

years every boy in a state public high school has been exposed every day to some type of physical activity under trained leadership.

Under this splendid set-up, the boys have been getting the skilled instruction and the competition they like and need. The track and field program has been a particular beneficiary. Built up solidly and appealingly, it attracts huge numbers of competitors. One of the best examples is the program offered by the Oakland High School Athletic League.

The OHSAL is composed of eight schools, which compete in the usual team activities. In track and field, a round-robin schedule provides seven dual meets. At the conclusion of the dual meet schedule, there is a preliminary meet for the seeding of competitors for a big, final championship. Dual meets are conducted in the orthodox manner—three entries in each event from each school; three places picked in each event; points scored on a 5-3-1 basis.

In both the dual and final meets the following events are included: 100-yard dash, 220-yard dash, 440-yard run, 880-yard run, mile run, 120-yard high hurdles, 160-yard low hurdles, high jump, broad jump, pole vault, shot put, and the 880-yard relay.

The rule governing the number of events a boy may enter is as follows: "Each athlete may participate

in (a) two track events, exclusive of the 440-yard dash, 880-yard run, and mile run, plus either the relay or a field event; (b) one track event and one field event, plus the relay; or (c) two field events, plus the relay."

Rules and Organization. At the conclusion of the dual meet season, each coach is supplied with suitable forms on which he makes out his entry list for the preliminary and final meets. Each school enters three contestants and an alternate for each event. The coach is cautioned to rank his boys according to their known ability. If this is not done, the method of seeding works a hardship on the competitors.

All entries must be in before the supervisor makes a draw for positions for the first and succeeding events. The simplest way to arrange this drawing is to place the name of each school on a slip of paper, then draw them from a hat or box. The following chart is then prepared for the initial event (the mile run) and the schools are placed in the order in which they were drawn.

Lanes	1	2	3	4	5	6	7	8
Schools	A	B	C	D	E	F	G	H
HEAT 1....	1	2	3	1	2	3	1	3
HEAT 2....	2	3	1	2	3	1	2	3
HEAT 3....	3	1	2	3	1	2	3	1

As can be readily noted, this method of choosing places permits the fastest runners to qualify for the fastest or "Class A" race in the

final meet. For example, in heat one of the mile run, although schools A, D and G have their No. 1 milers in the race, it is perfectly possible that the No. 2 runner of school B may be faster than the best milers of schools A, D, or G. In that case the No. 2 runner has an opportunity to finish in the first three picked places and thus go into "Class A." It is interesting to note, however, that since this type of meet was started, no one school has placed three competitors in "Class A"; however, there have sometimes been two competitors.

In the table, school A was the first one drawn, so it was allotted lane 1 for all three preliminary heats of the mile. For the next event, the 100-yard dash, school B would move across to the left and occupy lane 1; school A would move over to lane 8; each of the remaining schools would move one lane to the left. For each succeeding event the schools would rotate in this manner. The obvious reason for placing one school in the same lane for all the heats of one event is to simplify running off the meet. In actual practice, this type of rotation does not seem to work a hardship on a team.

Still using the table, it is noted that the mile runners of school A are listed 1-2-3 in rank order according to heats. For seeding purposes—and this is why it is important for coaches to rate their boys as accurately as possible—the mile runners of school B are listed in 2-3-1 order for heats 1-2-3 respectively, and the mile runners of school C are listed in 3-1-2 order for heats 1-2-3 respectively, etc.

Therefore, the first heat of the mile run would theoretically include the best milers from schools A, D, and G; the second-best milers from schools B, E, and H; the third best milers from schools C and F. With a constant rotation of schools by events and an equally constant rotation of boys according to heats, this seeding plan has worked out most effectively in placing the competitors in their respective ability groups.

Placement into Classes for Final Meet. The purpose of the preliminary meet is to place the competitors into as nearly equal groups of eight as possible for the final meet. To eliminate confusion, the races of the preliminary meet are called "heats" and those of the final meet are classified as "Class A, B, or C," "A" being considered the best group.

Accordingly, places for the various classes are picked as follows:

1st-, 2nd-, and 3rd-place winners in Heat 1 into Class A.

1st- and 2nd-place winners in Heat 2 into Class A.

1st-, 2nd-, and 3rd-place winners in Heat 3 into Class A.

4th- and 5th-place winners in Heat 1 into Class B.

3rd-, 4th-, and 5th-place winners in Heat 2 into Class B.

4th- and 5th-place winners in Heat 3 into Class B.

The faster 6th-place winner in Heat 1 or 3 into Class B.

7th- and 8th-place winners in Heat 1 into Class C.

6th-, 7th-, and 8th-place winners in Heat 2 into Class C.

7th- and 8th-place winners in Heat 3 into Class C.

The slower 6th-place winner in Heat 1 or 3 into Class C.

This type of placement presents one very difficult problem, that of picking eight separate places. This is not so difficult in the preliminary meet because even here there is some seeding apparent, but in the final meet, especially in the flat races, the judges have a difficult time. It is interesting to note, how-

ever, that in 1941 the motion pictures of the finish of each race showed the judges to be in error on only three occasions and those not very important.

Another minor difficulty is that a separate timer must catch sixth place in preliminary races in heats 1 and 3, since the fastest sixth place winner in heat 1 or 3 is placed in Class B.

In the field events seeding is unnecessary since each competitor sets up his own marks at the final meet. There is only one relay team from each school so here, too, preliminary seeding is not necessary.

Scoring for Final Meet. On the day of the final meet, 225 athletes from the eight schools report to Edwards Field at the University of California. Each and every contestant plays a vital role in the final team standings—for every boy is a scorer! This is indicated below. If he wins first place in the Class A mile race, his team is awarded 24 points. If he finishes last in the Class C mile, he still adds to his team's score by scoring one point. Altogether 3,408 points are divided among the eight schools in the twelve events.

TIME SCHEDULE

TIME SCHEDULE

		Class A			Class B			Class C								
		1st-24 pts.			1st-16 pts.			1st-8 pts.								
		2nd-23 pts.			2nd-15 pts.			2nd-7 pts.								
		3rd-22 pts.			3rd-14 pts.			3rd-6 pts.								
		4th-21 pts.			4th-13 pts.			4th-5 pts.								
		5th-20 pts.			5th-12 pts.			5th-4 pts.								
		6th-19 pts.			6th-11 pts.			6th-3 pts.								
		7th-18 pts.			7th-10 pts.			7th-2 pts.								
		8th-17 pts.			8th- 9 pts.			8th-1 pt.								
		The success or failure of an undertaking of this size is decided many days before the meet is held. It is decided by the scope and thoughtfulness of the pre-meet planning. No detail, however small, must be left to chance. One failure to carry through adequately even a portion of an assignment can make for hopeless confusion.														
		The three main considerations in planning the meet are (1) having the competitors in their places in the right order and at the proper time; (2) having facilities and judges available so that results are properly and quickly rendered; (3) having scoring devices that permit rapid and foolproof calculation. With these three points in mind, the description of organization follows.														
		Organization for Preliminary Meet. The organization of the preliminary meet is quite simple since there is no scoring. Only two pre-planned forms are essential, one showing the entries, Form 1, and one for the head timekeeper, Form 2.														
Track Events		Classes	Time													
1. Mile Run	C	1:00														
2. Mile Run	B	1:08														
3. Mile Run	A	1:16														
4. 100 Yds.	C	1:25														
5. 100 Yds.	B	1:30														
6. 100 Yds.	A	1:35														
7. 120-Yd. High Hurdles	C	1:40														
8. 120-Yd. High Hurdles	B	1:45														
9. 120-Yd. High Hurdles	A	1:50														
10. 440-Yd. Dash	C	2:00														
11. 440-Yd. Dash	B	2:05														
12. 440-Yd. Dash	A	2:10														
13. 220-Yd. Dash	C	2:20														
14. 220-Yd. Dash	B	2:25														
15. 220-Yd. Dash	A	2:30														
16. 160-Yd. Low Hurdles	C	2:40														
17. 160-Yd. Low Hurdles	B	2:45														
18. 160-Yd. Low Hurdles	A	2:50														
19. 880-Yd. Run	C	3:00														
20. 880-Yd. Run	B	3:05														
21. 880-Yd. Run	A	3:10														
22. Relay	A	3:20														
Field Events		Classes	Time													
1. Pole Vault	C	12:15														
2. Shot Put	C	12:30														
3. Broad Jump	C	12:30														
4. High Jump	C	12:30														
5. Pole Vault	B	1:30														
6. Shot Put	B	1:30														
7. Broad Jump	B	1:30														
8. High Jump	B	1:30														
9. Pole Vault	A	2:30														
10. Shot Put	A	2:30														
11. Broad Jump	A	2:30														
12. High Jump	A	2:30														

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The names of the contestants in
(Continued on page 23)

DISTANCE RUNNING

By W. HAROLD O'CONNOR

W. Harold O'Connor, a frequent "Scholastic Coach" contributor, is baseball and track coach at Burrillville High School, Harrisville, R. I.

AS THE high school track coach tackles his job these days, he should keep in mind that his work must supply more than the foundation for that record-breaking mile in the county or state meet.

He must see his training as a foundation for a more serious type of running. For, within a few months, some of his boys will be taking two-mile runs daily in "boot" training, while others will be doing forced marches, partly "on the double," with army units.

The stamina and competitive spirit the coach develops will, thus, do more than make superior runners; it will make superior soldiers.

Since distance running is part of all military training, it will behoove the coach to make distance work part of every boy's daily schedule, regardless of whether he is a sprinter, high jumper, shot putter, or miler. The boys may gripe or grumble about it, but the ones who complain the loudest are often the ones who need the work most.

I've found that many boys must be convinced they can run a mile or two without stopping. For this reason, I've been playing close attention to the psychology of running.

Correct psychology in training helps to overcome much of the initial difficulty. If you can get out

there with your boys and jog along with them the first couple of weeks, you can help. You can joke and "kid" them along as you gradually increase the work-outs from alternating quarter mile jogs and quarter mile walks to full mile jogs and beyond that.

The teasing-joking-participating coach can get the unconfident boys through that stage of training in which so many of them quit out of discouragement. If you can get your squad to join in the spirit of the fun, you will get them into condition for harder work without their feeling the strain. Incidentally, you will probably do yourself a little good, too.

As you work out with your boys, use your eyes and ears. For some years I have observed with interest the breathing rhythm of distance men. This is more important than many coaches realize. You will notice that some boys have a slow, measured breathing rhythm, while others noisily gulp air with every step. It is an obvious effort for such fellows to run distances, even at a slow pace. Your natural inclination is to say, "These fellows will not do. I better put them into the sprints or the field events."

But what if they have little natural speed? Or if they are not built for field events? Shall you drop them? You can't do this, especially when you remember what is awaiting them in the service.

It's up to you to do what you can to help them. I believe you can begin by teaching them a breathing rhythm. Yes, I said *teaching*. In this

respect, distance running resembles swimming. For swimming coaches must teach timed breathing. While breathing rhythm is not a vital consideration for sprinters, it is tremendously important for distance runners.

Set a rhythm for the boys to follow. First have them watch and listen to some of the boys who have an easy natural rhythm. Do this in the early days of their training. Once they realize what you want, have them move along at an easy pace repeating to themselves a reminding phrase, such as "S-L-O-W and L-O-W." Try to have them coordinate breath and stride so that they breathe in and out on every second stride.

There are men who insist that the boy's natural needs set his breathing rhythm, and that only better conditioning can control such needs. I'm not sure this is entirely true. I am convinced that the oxygen need is partly artificial. I think it can be controlled mentally to some extent. By centering the boys' attention upon a relaxed, easy breathing rhythm, I have noticed a definite improvement in their breath control, and, as a direct consequence, in their running.

This improvement can be traced partly to psychology and partly to an actual improvement in breath control. My own experiments lead me to believe that even the better distance runners on the squad can be improved by being taught a slower breathing rhythm.

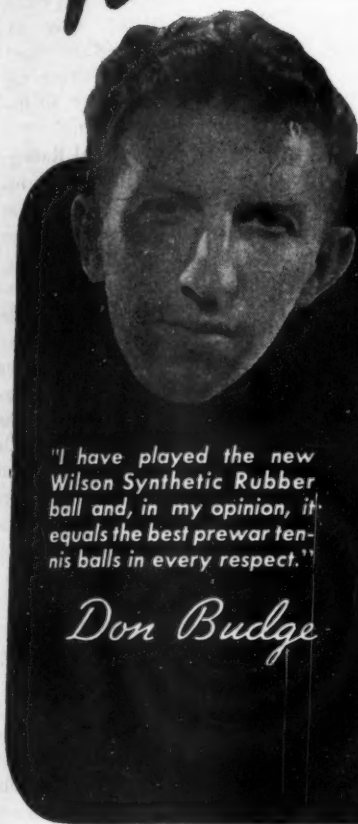
Perhaps I should make it clear at this point that I do not believe that all runners can be taught the same rhythm. Individual differences prevent that. We can, however, try to regulate the breathing of each so that it approximates what we want in distance runners. In working along this line, stress not so much the noise of breathing as the

(Continued on page 31)



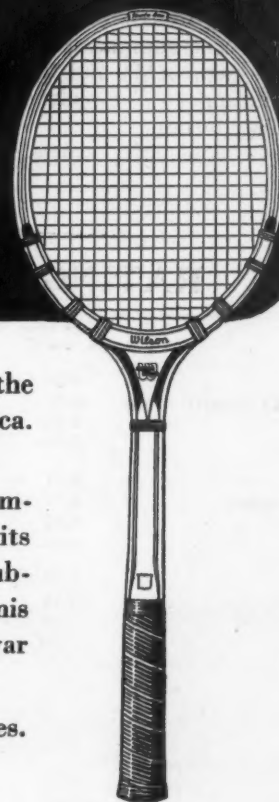
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THE PHYSIOLOGY OF FITNESS

By Dr. Thomas K. Cureton

No. 6 in the series shows how to evaluate individual and group progress by various tests and measurements

This is the sixth of a series of articles on physical fitness by the distinguished physical educator and author, Dr. Thomas K. Cureton, who is associate professor of physical education at the University of Illinois.

EVERY physical educator is interested in evaluating and measuring improvement in educational programs. Unfortunately many of the activities of greatest importance have not been normed. And without standard score scales, the problem cannot be handled.

Coaches and directors without training in tests and measurements or statistics will need someone to help them construct the scales. The use of such scales, however, requires no specialized training.

The steps followed in constructing the standard score rating scale are as follows:

1. A group of subjects is measured in the event to be normed and the data are tabulated in a frequency distribution.

2. The computations are made for the mean (M) and the standard deviation (σ)—Greek sigma—of the distribution.

3. The raw score increment is

computed for each five points of the standard score scale. This scale is arbitrarily written in from 0 to 100 in 5-point step intervals (see Table 1).

4. The computations are made for the corresponding raw scores to go in the clock time and decimal time columns. The standard score 5-point increments are subtracted from the mean and added to the mean successively. The results are then extended to clock time in minutes and seconds.

5. The table is ruled off as shown and the rest of the table is filled in according to a standard pattern, assuming a normal distribution of the data (or a close approximation).¹ The T-score values always have a standard relationship to the standard scores if the distribution is normal.

¹This method is the same as that used in the following published scales: M. H. Trieb and N. P. Neilson, *Physical Education Achievement Scales for Boys in Secondary Schools*, New York: A. S. Barnes and Co., 1936, Pp. 115. F. W. Cozens, *Achievement Scales in Physical Education Activities for College Men*, Philadelphia: Lea and Febiger, 1936, Pp. 118.

²John F. Bovard and F. W. Cozens, *Tests and Measurements in Physical Education* (2nd edition, revised), Philadelphia: W. B. Saunders Co., 1941. (Conversion table for percentiles from standard deviation scores is on p. 411.)

Table 1

RATING SCALES for the MILE RUN

	Clock Time (M. and S.)	Decimal Time (M. and Dec.)	Letter Grade	Numerical Score	Standard Score	T-Score	Percent- iles
EXCELLENT	4:54	4.90	A	100	100.0	79.9	99.87
	5:07	5.12			95	76.9	99.65
	5:20	5.34			90	74.0	99.18
	5:34	5.56		90	85	71.0	98.21
GOOD	5:47	5.78	B		80	68.0	96.41
	(2) 6:00	6.00			75	65.0	93.32
	6:13	6.32			70	60.7	85.31
	6:26	6.44		80	65	59.1	81.59
AVERAGE	6:40	6.66	C		60	56.1	72.57
	6:53	6.88			55	53.1	61.79
	7:07	Mean 7.11			50	50.0	50.00
	7:20	7.33		70	45	47.0	38.21
(1)	7:33	7.55	D		40	44.0	27.43
	7:46	7.77			35	41.1	18.41
	7:59	6/17/43 7.99			30	38.1	11.51
	8:13	8.21		60	25	35.1	6.68
FAILING	8:26	8.43	F		20	32.1	3.59
	8:39	8.65			15	29.1	1.79
	8:53	8.87			10	26.2	.82
	9:05	9.09			5	23.2	.35
	9:19	9.32			0	20.1	.13

Statistical Constants: M = 7.11 N = 365 σ = .739 r_{11} = .84

Note on Table Construction: The standard deviation subtracted three times fixes the upper limit of the table and when added three times fixes the lower limit; both are calculated from the mean on the assumption that the distribution is normal. Sometimes the sample may not be adequate for this purpose, then the values must be adjusted empirically or the data rejected. For each five-unit standard score step interval the calculations are made by adding or subtracting successively from the mean the raw score increment from

the formula: Raw Score Increment = $\frac{6\sigma}{100} \times 5$

However these may be computed as they have been in Table 1.

For a 6-standard deviation range the T-scores would start at 80 and go down to 20 in a perfect distribution. Actually they may be close approximations to this if actually computed. The percentiles may be taken from a table in either case. This results in a table wherein the steps are of equal difficulty all the way up and down the scale.

Example of an Individual Rating. A subject ran a mile in 7:59 in his first trial. This time is encircled in the table. Three months later, after considerable training and coaching, he does it in 6:00. This is also encircled. A notation as to the date is made beside these trials. The corresponding grades, both as to letter or number, are shown directly opposite these values. The mile time of 7:59 is equivalent to a percentile rating of 11.51. This means that 88.49 per cent of the group were better in performance than the subject. The general classification is POOR. The T-score rating is 38.1.

Considerable confusion exists over the use of different types of scores. A brief definition is given of those which show in Table 1:

Raw Score—The direct result of the test in terms of minutes, seconds, or in such units as distance, pounds, times, beats per minute, mm./Hg., etc. These are always recorded.

Letter Grade—The same as is used in educational systems, i. e., A, B, C, D, E, or F. Usually A is at the high end of the scale and F at the low. In the case of some biological items, such as systolic blood pressure, body type and fat the best result is in the middle of the data rather than at the top. This type of scale must be treated separately and is incommensurate with the normal distribution type.

Numerical Grade—The usual numerical equivalents of the letter grades. These vary a bit in different schools but the most usual pattern is: A = 90 to 100; B = 80 to 89; C = 70 to 79; D = 60 to 69; E = 50 to 59; F = below 50, failing.

Standard Score—The standard score is based upon the principle that it is a fractional part of the sigma. The most common pattern is to assume a six standard deviation spread and divide this into a 100

(Continued on page 16)

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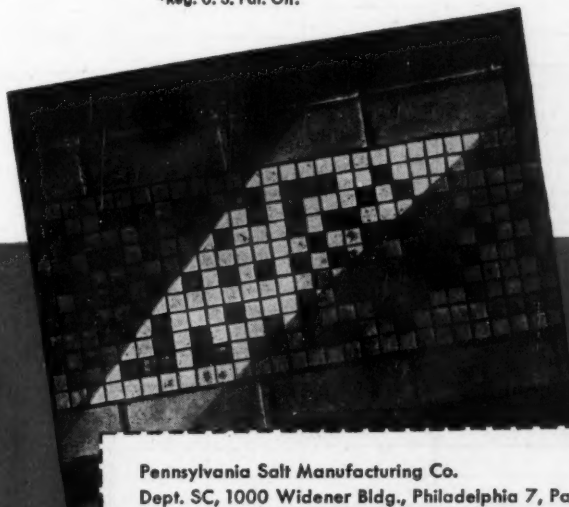
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NAME OF POOL _____

ADDRESS _____

parts. Each unit of the 100 point scale is then:

$$\frac{66}{100} = \text{Standard Score (100 units)}$$

This score assumes a normal distribution.

T-Score—This score is based upon a fractional part of the standard deviation also but the range is taken as ten sigmas. Each T-score becomes equal to 1/10th. sigma.

Percentile — Is a score which shows the proportion of the population above or below each percentile point in the distribution. Relative placement in the group is shown by the percentile point. When taken from a conversion table, the percentiles assume a normal distribution of the data but they may be computed for any shape distribution.

Computing Individual Improvement: Why aren't per cent scores good enough for records of improvement? In certain cases per cent cal-

culations may be used but there are certain precautions which are necessary. Calculations take time and it would be better to use a table which would read directly in per cent values.

Per cent improvement is usually taken as the gain over the starting point times 100. Unless the denominators are equal, this calculation yields answers for two different calculations which are not strictly comparable. If the denominator is always 100, then the results are comparable. One unit of per cent is not equal to another unit of per cent when the starting points are different and the variability is different for the two distributions. Many misleading results are obtained by the indiscriminate use of this system.

For instance, as an example, there are at least six ways of computing the improvement in the mile sample given:

SCHOLASTIC COACH

1. The usual per cent calculation, with the starting point as the base:

$$\frac{7.99 - 6.00}{7.99} \times 100 = 24.9\%$$

2. The per cent gain in percentile rank, the starting point as the base:

$$\frac{93.32 - 11.51}{11.51} \times 100 = 71.1\%$$

3. The per cent gain in percentile rank, the denominator the whole percentile range:

$$\frac{93.32 - 11.51}{100} \times 100 = 81.8\%$$

4. The per cent gain related to the mean as the base:

$$\frac{7.99 - 6.00}{7.11} \times 100 = 28.0\%$$

5. The per cent gain related to the whole time range:

$$\frac{7.99 - 6.00}{4.42} \times 100 = 45.0\%$$

6. The per cent gain in the standard score scale related to the whole range of the standard scores. When working with a standard score table this is the preferred method:

$$\frac{75 - 30}{100} \times 100 = 45.0\%$$

These per cents can be meaningfully averaged or added but the others cannot be so used unless they are all of one type and carefully defined.

Recording Individual Improvement: Table 2 shows a Data Sheet for Recording Individual Improvement in a variety of motor fitness items. These are mostly endurance items. Basic data should be preserved if, in the future, it will be needed for constructing scales such as Table 1.

In the endurance items motivation is a tremendous factor. This may be shown by entering one, two, or three preliminary trials, then putting on considerable emphasis for the I-A trials, perhaps basing mid-term marks on the results. A week later the I-B trials should be given. At the end of the course this same procedure should be repeated in the II-A and II-B trials. This type of data sheet permits checking on initial educational effect, motivational effect, and reliability of the first compared with the second round of formal tests for grade. If testing could be done with this care, the resulting scores would be very much more meaningful.

Measuring Group Improvement: Measuring group improvement is done by averaging the scores of a group at the start of a course of instruction and again at the end of the course. The graphical representation of improvement and the calculations are shown on Table 3. The improvement is the direct result of subtracting the first average (M_1) from the second (M_2).

(Continued on page 18)

Table 2

DATA SHEET FOR RECORDING INDIVIDUAL IMPROVEMENT

Name..... (Last) (Initials) No.

Instructor:

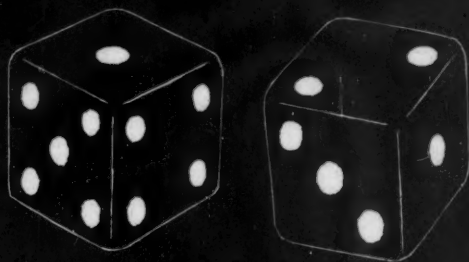
Address..... Class:

Age: Height: Weight:

Body Type Number: Body Type Class:

ITEM	PRELIMINARY PRACTICE	TRIALS			
		I-A	I-B	II-A	II-B
1. Chinning the Bar					
2. Chest Raisings					
3. Forearm Push-Ups					
4. Side Leg Raisings: R.					
L.					
5. Sitting Tucks					
6. Hops					
7. Floor Push-Ups					
8. Stick Body					
9. Extension Press-Ups					
10. L-Twist					
11. Full Squat Jumps					
12. Dips on Parallel Bars					
13. Backward Leg Raisings					
14. Leg Lifts (without shoes)					
15. Elbow Touch and Cross-Over Sit-Ups					
16. Heel Raising Piggy-Back					
17. Straddle Chinning					
18. Neck Bridge					
19. Sit-ups (feet free)					
20. 300-Yd. Shuttle Run					
21. Mile Run					
22. Hang on Bar					
23. V-Sit					
24. 100-Yd. Dash					
25. 1000-Yd. Run					
26. Step Test					

Don't take Chances



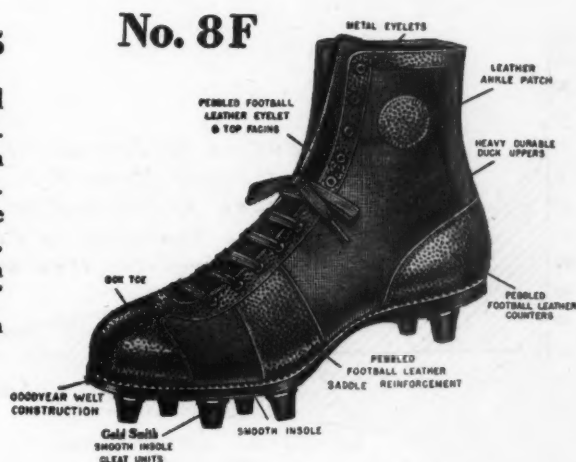
On Future Delivery of Leather Football Shoes!

THE SCARCITY OF LEATHER MAKES FUTURE DELIVERY OF LEATHER TOP FOOTBALL SHOES EXTREMELY UNCERTAIN! THESE DUCK UPPER SHOES WILL SOLVE YOUR FOOTBALL SHOE PROBLEMS. STURDILY CONSTRUCTED, THOROUGHLY TESTED, SUITABLE FOR PRACTICE AND GAME USE.

No. 8F - List \$12⁰⁰ Trade \$8⁹⁵

Heavy olive drab duck uppers, leather reinforced saddle instep, leather eyelet lacer strip and ankle patch. Genuine Goodyear welt construction, oak soles with cadmium plated rust-proof Swedish spring steel plates. Hard toe, straight shank, high 11 eyelet uppers. One piece leather outside counter pocket and back stay, leather counters. Top of uppers reinforced with leather, bound tongue. Goldsmith "Smooth Insole" cleat assembly, detachable regulation "C" $\frac{7}{8}$ -inch high hexagon base cleats.

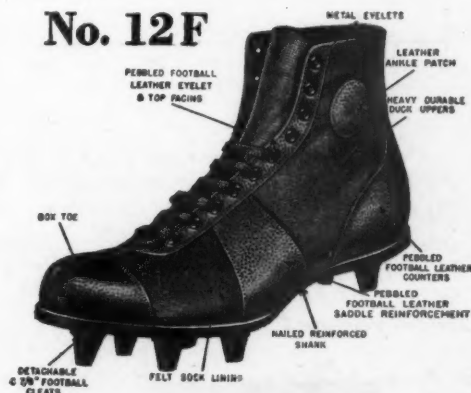
Stock Sizes—6 to 12 inclusive, E width.



No. 12F - List \$8⁰⁰ Trade \$5⁹⁵

Heavy olive drab duck uppers, leather reinforced saddle instep. Leather back stay, top of uppers reinforced with leather. Leather eyelet lacer strip, leather ankle patch. Hard toe, rock oak soles with steel plates, reinforced nail-clinched shank. Bolt, nut and washer cleat assembly, detachable regulation "C" $\frac{7}{8}$ -inch high hexagon base cleats.

Stock Sizes—5 to 12 inclusive, E width.



These Shoes are now in Production . . . Delivery Guaranteed . . .

Order Now from your GoldSmith Distributor!

The Emergency Price Control Act of 1942 now governs Trade and List prices. Suggested prices only appear on this ad.

THE P. GOLDSMITH SONS INC. CINCINNATI 14, OHIO U.S.A.

CLASSIFICATION	ARMS, SHOULDERS AND UPPER BACK				ABDOMINAL REGION					BACK REGION				FEET AND LEGS			GRADING SCALES				
	Chin-up	Dips on Parallel	Push-Ups From Floor	Push-Ups With Chest-Slaps	Sit-Ups (feet free)	Leg-Lifts	V-Sit (Secs.)	Double Knee-Bends, Sitting	Flutter Kicks On Back	Backward Stick-Body	Partner Chest Raisings	Backward Leg Raisings	Flutter Kicks On Front	Hops	Breast Stroke Exercise	440 Yard Piggy Back Carry	Letter Grade	Numerical Grade	Standard Score	T-Score	Percentile
SUPERIOR	19.5	25	42	21	69	70	122	98	353	152	63	85	379	810	377	1:38	A +	100	100	80	99.87
	18.5	24	39	20	65	66	114	91	328	142	59	80	351	805	348	1:51					
	17.5	22	37	18	60	61	107	85	303	132	56	74	323	800	320	2:04					
VERY GOOD	16.5	21	34	17	56	57	99	79	277	121	52	69	295	795	291	2:16	A	90	85	71	98.2
	15.5	19	32	16	52	53	91	72	252	111	48	63	260	791	263	2:28					
	14.5	18	29	14	48	49	84	66	227	101	44	58	238	786	234	2:41					
ABOVE AVERAGE (Good)	13.5	16	27	13	43	45	76	60	202	90	41	52	210	781	206	2:53	B	89	70	62	88.4
	12.5	15	24	12	39	41	69	53	177	80	37	47	182	776	177	3:06					
	12.0	14	22	10	35	37	61	47	151	69	33	41	154	727	149	3:18					
AVERAGE	11.0	12	19	9	30	33	54	41	126	59	29	36	126	677	120	3:30	C +	79	55	53	61.8
	10.0	11	17	7	26	29	46	35	101	49	25	30	98	628	92	3:43					
	9.0	9	15	6	23	25	40	28	76	38	22	25	69	578	63	3:55					
BELOW AVERAGE	7.5	8	13	5	19	21	34	22	50	28	18	19	41	529	35	4:07	C	74	40	44	27.4
	7.0	6	11	3	16	17	27	16	25	18	14	14	13	480	31	4:21					
	6.0	5	8	2	12	13	21	9	22	7	10	8	11	430	26	4:33					
POOR	5.0	4	7	2	10	9	18	8	18	6	7	7	9	381	22	1:46	D	Pass- ing	25	35	6.7
	4.0	3	5	2	8	5	14	6	14	5	3	6	7	331	17	4:58					
	3.0	2	4	1	6	4	11	5	11	4	2	4	6	282	13	5:10					
VERY POOR	2.0	1	3	1	4	2	7	3	7	2	1	3	4	233	9	5:23	Fail- ing Eor F	60	10	26	32
	1.0	1	1	1	1	1	4	2	4	1	1	1	2	183	4	5:35					
	.5	0	0	0	0	0	0	0	0	0	0	0	0	134	0	5:47					
M	9.81	10.67	16.49	7.47	26.27	29.00	46.10	34.60	100.88	48.64	25.41	30.38	97.52	627.75	91.93	3.72					
σ	3.23	4.77	9.54	4.49	14.18	13.51	25.14	21.00	84.08	34.54	12.60	18.39	93.84	164.65	94.90	.692					
N	381	3117	374	256	294	452	353	222	228	242	172	171	218	40	113	204					
r_{11}	.95	.96	.89	.75	.56	.73	.80	.85	.70	.71	.64	.73	.75	.82	.80	.80					

Above: A Multiple Rating Scale for Muscular Endurance Events (see page 20).

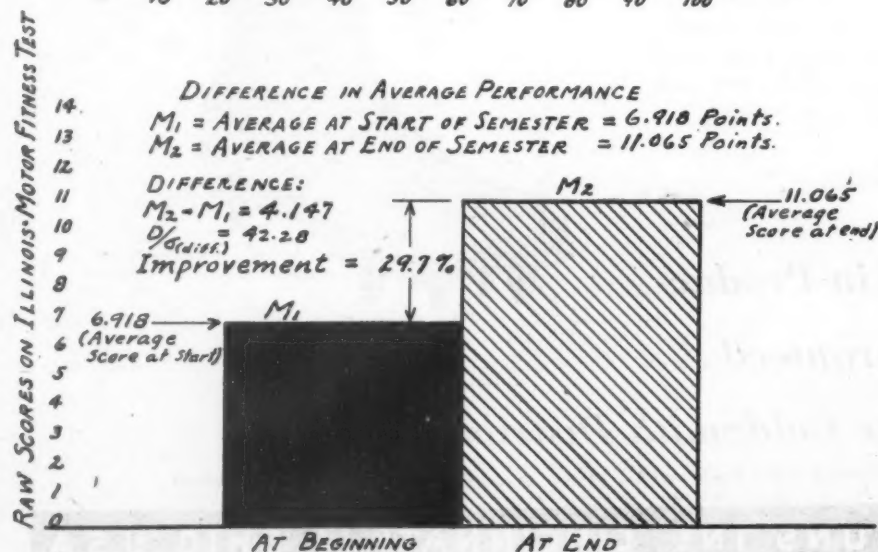
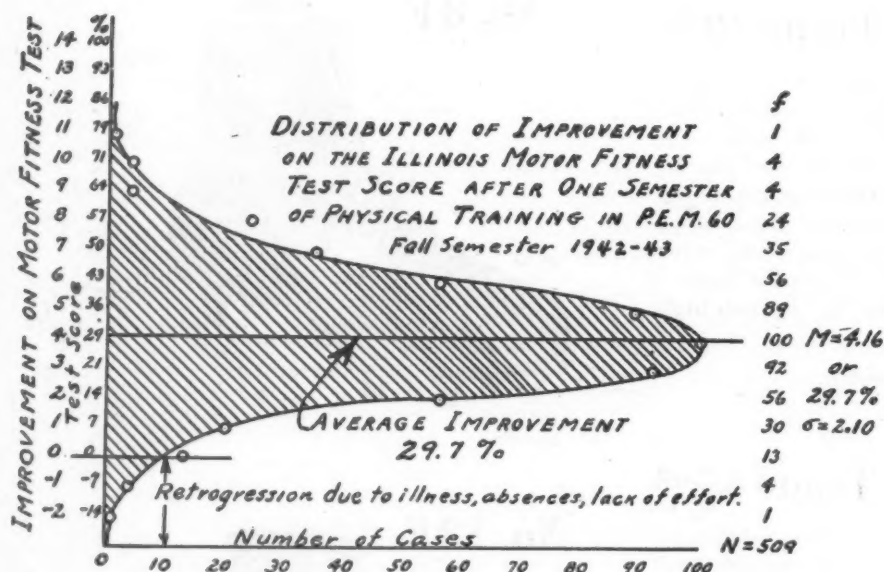


Table 3

The first average is used as the denominator in computing per cent improvement by the formula:

$$\% \text{ Improvement} = \frac{M_2 - M_1}{M_1} \times 100$$

In careful work wherein small differences result and the number of cases are not large, it is necessary to test the difference obtained between the means to be assured that it is greater than the standard error of sampling. The stability of the difference is very important under these conditions. There are several methods for evaluating the reliability of the difference but the usual method is to compute the critical ratio, wherein,

$$\text{Critical Ratio} = \frac{\text{Difference}}{\sigma (\text{diff.})}$$

To be considered reliable enough to meet the customary standards the critical ratio should be greater than 3. There is another method for treating small samples which is not given here.

In "Pass" and "Fail" data such as used with motor fitness screen tests the per cent who fail an item at the start of a course may be compared with the per cent who fail the item at the end of the course. Strictly speaking, the same number of identical cases should be used. This standard is not always maintained and the results are undoubtedly useful even if computed on a different number of cases.

Since "Pass" and "Fail" scores do not yield a continuous normal dis-
(Concluded on page 20)

"Rifle shooting is a great conditioner of both mind and body," writes **STERLING H. ROLSTON**

of Central Vocational High School
Cincinnati, Ohio



Central Vocational High School

CINCINNATI PUBLIC SCHOOLS
2313 IOWA STREET
Cincinnati, Ohio

January 11, 1944

Scholastic Coach
220 East 42nd Street
New York 17, N. Y.

Gentlemen:

I am happy to say that I have club members inquire almost every day as to when we are going to enter another National Scholastic Rifle Tournament.

Rifle shooting is certainly a great conditioner of both mind and body. It's hard to beat it for teaching self-discipline and responsibility. And organized club shooting such as ours, I feel, is also a great factor in controlling juvenile delinquency. Give a boy or girl a rifle and proper supervision, and a lot of worries are eliminated. It not only opens up a new and fascinating world to them, but also gives them companionship in clubs with the finest youth in America. I have found that our members who attend rifle meets regularly and shoot exceptionally good scores are those who are tops in about everything they attempt to do.

We have had quite a few members who enlisted in the armed forces, and they were shooting some excellent scores before leaving, which is certainly a most comforting feeling to all concerned.

Sincerely yours,

Sterling H. Rolston
Sterling H. Rolston,
Instructor

Remington will help you plan the organization of a rifle club and the building of a range. As a starter, we will be glad to send you, free, an interesting, fully illustrated booklet containing instructions on the operation of a rifle club—including information on equipment, marksmanship, target shooting, and the construction of rifle ranges. Just fill in the coupon and mail it to Rifle Promotion Section, Remington Arms Company, Inc., Bridgeport 2, Conn.



Remington Model 51ST bolt action target rifle and Remington .22's with Klean-bore® priming.



Remington



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Rifle Promotion Section
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School

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Have you won the game over Athlete's Foot Control for them?



They're off to the showers—and perhaps to the army of different species of fungi causing Athlete's Foot. Protect those who use your showers and dressing rooms by using the Dolge method of Athlete's Foot Control.

Alta-Co Powder—one pound dissolved in a gallon of water and placed in strategically placed foot tubs—will combat the spread of Athlete's Foot. It has multiple advantages:

- 1—Kills all different species of fungi and their tough spores.
- 2—is speedy—kills fungi in less than 60 seconds.
- 3—is non-irritating to the skin.
- 4—does not damage towels.
- 5—does not give off harsh, druggy fumes.
- 6—is stable in solution.
- 7—can be quickly checked by inexpensive Alta-Co Tester.
- 8—is economical to use.

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THE C. B. DOLGE COMPANY
WESTPORT, CONNECTICUT

For scientific Athlete's Foot control



Alta-Co POWDER

The C. B. DOLGE Co.
Westport, Connecticut

tribution of results, the continuous standard score scale cannot be arranged to scale each item. The method which can be used is diagrammatically shown in Table 4. Each vertical bar is plotted against a 100 per cent scale shown at the left. The black part is proportional to the per cent who failed the item at the start of the course of training and the cross-hatched part is proportional to the per cent who failed the item at the end of the course. The white part of the bar is the difference in the per cent of the failures.

Table 4 shows that Leg-Lifts and Sit-ups improved 61.58%, Mile Run 63.50%, Medicine Ball Put 37.28%, Squat Stand 36.97%, Running Dive and Roll 31.98%, and Trunk Flexion 31.68%. This means that the conditioning program influenced these events most out of the fourteen events studied. This might be one base for arguing the validity of the items in a testing battery.

All body types improve with training but with the Illinois Motor Fitness Test the muscular well-built men improve 39.27% as an average, the medial types improve 28.30%, the thin-frail ectomorphic types 28.55%, the fat endomorphic types 23.28% and the feminoid (poorest muscular ratings and girlish proportions) 14.28%, all on the composite scores of the 14-item test.

Reliability and Objectivity: Repeating the measurements at the

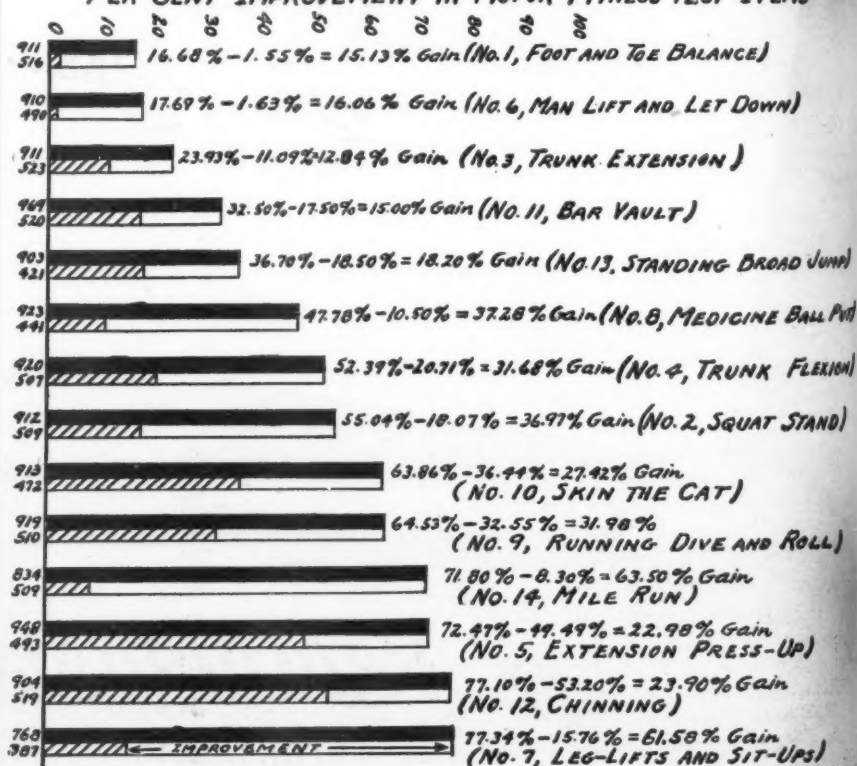
same time, place, and under the same conditions of leadership provides the basis for calculating the reliability of each item. The first trial data are correlated with the second trial data. The conditions should be as identical as possible. The assumption is that no learning or improved condition has accumulated between the time of the two tests.

A special form of reliability may be computed called objectivity wherein the results of one examiner are correlated with those of another examiner, using the same subjects. A test item with a reliability coefficient lower than .80 should be seriously examined for improved administration or be excluded. Usually the average of three trials will improve reliability. In balance tests three trials are given to pass the item and this gives better reliability.

Arranging several tests in the form of a Multiple Rating Scale is the most economical and most usable way to arrange normative material to show status and improvement. Such a multiple scale has the separate scales matched as normal distributions within the space allowed. If the scores of a subject are normal in every item, the scores will fall at the 50 line all away across the chart. Items may be compared to show relative ability or relative symmetry of accomplishment.

Table 4

PER CENT IMPROVEMENT IN MOTOR FITNESS TEST ITEMS



IC COACH
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The first
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ALL THE VOIT

SYNTHETIC-RUBBER-COVERED ATHLETIC EQUIPMENT

They want...

AND SOME FOR *You!*

Yes—the armed forces have first call on our output. That's why your dealer has only a limited quantity of Voith Synthetic-Rubber-Covered athletic equipment. As to the limited quantity avail-

able for civilian use, be assured orders will be apportioned fairly among our customers. We fully expect to take care of your total requirements in late summer and fall. To get your share of these new balls now, contact your dealer early. Voith Synthetic-Rubber-Covered Basketballs, Footballs, Soccer Balls, Volley Balls, Water Polo Balls, and Soft Balls play better, last longer, resist wear on rough playing surfaces, stay inflated longer. Write for illustrated price list today.

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SYNTHETIC-RUBBER-COVERED
ATHLETIC EQUIPMENT

Mfgd. by W. J. Voith Rubber Corp., 1600 E. 25th St., Los Angeles 11, Calif.

Chicago Branch—180 No. Wacker Drive Zone 6

Event	A	B	C	D	E	F	G	H	Totals
1.									
Totals									
2.									
Totals									
3.									
Totals									
4.									
Totals									
5.									
Totals									
6.									
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Totals									
10.									
Totals									
11.									
Totals									
12.									
Grand Totals									
Place									

OAKLAND
O. A.

Event: **HIGH JUMP**

Turn	Name of Competitor	School	5'8"	5'10"	5'9"
1					
2					
3					
4					
5					
6					
7					
8					

FIRST PLACE: Name _____

SECOND PLACE: Name _____

THIRD PLACE: Name _____

FOURTH PLACE: Name _____

FIFTH PLACE: Name _____

SIXTH PLACE: Name _____

SEVENTH PLACE: Name _____

EIGHTH PLACE: Name _____

1. Each competitor is to be allowed three tries at each height.

2. The High Jump for Class C is to start at 4'8" and work up to 5'0".

3. The High Jump for Class B is to start at 4'10" and work up to 5'2".

4. The High Jump for Class A is to start at 5'0" and work up to 5'6".

5. At the end of the event, please send this card to the _____.

Signature _____

3 FIRST PLACE

A

Name _____ School _____

MILE RUN

Event _____

School _____

OAKLAND PUBLIC SCHOOLS

O. A. L. Track Meet

ENTRY CARD

Event: **HIGH JUMP**

Turn	Name of Competitor	School	Class														Results
			5'8"	5'10"	5'6"	5'2"	5'4"	5'5"	5'6"	5'7"	5'8"	5'9"	5'10"	5'9"	5'11"	5'8"	
1																	
2																	
3																	
4																	
5																	
6																	
7																	
8																	

FIRST PLACE: Name: _____

School: _____

SECOND PLACE: Name: _____

School: _____

THIRD PLACE: Name: _____

School: _____

FOURTH PLACE: Name: _____

School: _____

FIFTH PLACE: Name: _____

School: _____

SIXTH PLACE: Name: _____

School: _____

SEVENTH PLACE: Name: _____

School: _____

EIGHTH PLACE: Name: _____

School: _____

Form 5

- Each competitor is to be allowed ~~three~~ two tries at each height.
- The High Jump for Class C is to start at 5'8" and will be raised two inches up to 5'4" and one inch each time thereafter.
- The High Jump for Class B is to start at 4'10" and will be raised two inches up to 5'4" and one inch each time thereafter.
- The High Jump for Class A is to start at 5'0" and will be raised two inches up to 5'8" and one inch each time thereafter.
- At the end of the event, please send this card to the secret, _____ after recording the winners.

Signed _____

(Judge)

3 FIRST PLACE
Name _____ A _____ School _____
MILE RUN

[illegible][illegible]

OAKLAND PUBLIC SCHOOLS

O. A. L. Track Meet

ENTRY BLANK

RELAY

Lanes of Competitors

School

1

2

3

4

5

6

7

8

Form 4

Signed _____ (Date) _____

Here are the seven basic forms for Oakland's track meets. The Finals Entry Card is similar to Form 1, except that it substitutes Classes for Heats. There are three sets of Form 3; a

white card (as shown) for Class A competition, a brown card for B and a green for C. Form 5 shows the Entry Card for the high jump. (Also used for Pole Vault, Shot Put, Broad Jump.)

Oakland's Model Track Meet

(Continued from page 11)

their respective lanes can be typed in on Form 1 after the coaches have sent in their entries (before the meet). Two copies of this form are provided for each event, one for the clerk of the course and one for the head judge of the finish.

The mechanics are simple. The clerk of the course has all the information on one card for any one event. He knows the lane, school and name of each competitor. As the judges decide the places at the conclusion of the race, they take their picks to the head judge. The head judge takes the boy's name, school and place, and records over the boy's name on his copy of the typed form the place number of the boy for the race just finished.

Form 2 is used in both the preliminary and final meets. There are always three timers for each race with the head timer indicating the "call time," or official time for the race. In the preliminary meet this form is also used by the extra timer timing sixth place.

Under the "Event" column each race is typed in; i.e., in the preliminary meet "Heat 1, Mile," "Heat

2, Mile," etc., are typed in; in the final meet "Class C, Mile," "Class B, Mile," etc., are typed in. The names of the timers are placed under the numerals I, II, etc.

Organization for Final Meet. For the final meet, the three major problems must again be met. First of all, the contestants must be properly placed by schools, lanes and events. After the preliminary seeding, it is possible to have only three schools represented in any one class; for example, school A might qualify three boys for Class A, Mile, school B might qualify three boys for Class A, Mile, and school C might qualify two boys for Class A, Mile. This has never happened but the possibility exists. At no time since the inauguration of this type of meet in 1932 have we had a race with less than five schools represented.

To get back to the example of three schools in Class A, Mile, the school that had the nearest lane to the "pole" according to the original drawing before the preliminary meet would take the number 1 lane and succeeding lanes according to

the number of entrants they had in the race.

For example, in case school A should have had lane 1 in the mile run of the preliminary race, and placed three runners in the Class A, Mile, that school would place its boys in lanes 1, 2 and 3 in the final race; School B, also with three runners in Class A, Mile, and in lane 2 in the preliminary mile run, would take lanes 4, 5 and 6; and school C, with two runners in Class A, Mile, and in lane 3 in the preliminary mile, would take lanes 7 and 8. While this type of lane selection saves some time in starting, it would be possible to draw for lanes before each race.

The finals entry card is similar to Form 1, except that it substitutes Classes for Heats. It is made in duplicate, one copy for the clerk of the course and one copy for the head scorer. All the information essential to the clerk and the scorer is on this form; namely, lanes, schools, classes, and names of the contestants.

At the completion of each race the judges must place each boy in his respective finishing position. At this point the scoring devices are brought into play. Aside from the head judge of the finish, there is at least one judge assigned to pick

"HE'S OUT!"
— IN MORE WAYS THAN ONE!



These early season games are tough on your squad. Right now, when your players are still soft, you're apt to be faced with a whole crop of injuries. Charley horse, strained ankles, "glass" arm — wrenched muscles.

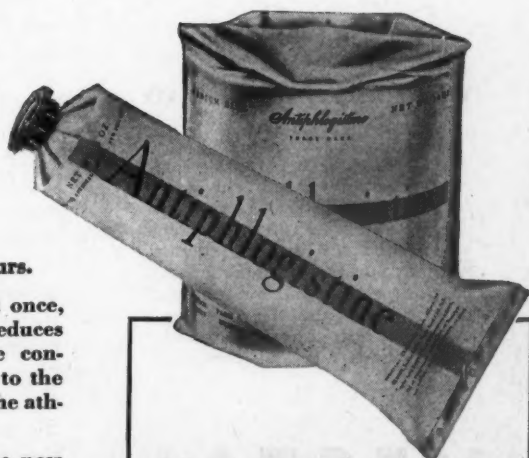
For all these early season injuries Antiphlogistine is a tried and proven first aid — a ready-to-use medicated poultice. Employed by crack trainers — the country over — because it is specially qualified to

maintain "Moist Heat" for many hours.

An Antiphlogistine pack applied at once, comfortably hot, relieves the pain, reduces swelling, speeds recovery. It's the convenient way to get healing warmth to the injured area — without disturbing the athlete's rest.

Check your stock of Antiphlogistine now — at the start of the full season — have enough to deal with the many emergencies that Antiphlogistine is good for.

Write in for Your FREE Booklet — "Athletic Injuries"



Antiphlogistine

The Denver Chemical Mfg. Company
New York 13, N. Y.

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SLIP-PROOF
GYM FLOOR
treated with
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each place. In the case of third, fourth, fifth, and sixth places, two men are assigned with one man acting as head judge for that particular place. Each of the eight head judges are given a set of cards for his particular place (Form 3).

The man judging first place would have a series of three first-place cards for each track event. These cards are of different colors for each class, thus preventing confusion. As Class C, Mile, finishes (classes are run in reverse, C to A), the judge of first place chooses his boy and gets his name and school, placing the information on the "First Place Class C, Mile" card.

The head judge of the finish collects the eight cards, notes the winning time on the winner's card, and then gives them to a messenger who takes them to the head scorekeeper. Three messengers are used, one for each class; they are selected at the same time as the officials. This type of organization is used for each race in each event. It is speedy and efficient.

Relay teams are limited one to each school, so there is no need for seeding. Form 4 is used in the final meet for scoring the relay.

Organization for Field Events. On proper forms, not shown herein, the coaches indicate their entries for the four field events, listing three boys and an alternate for each event. There is no preliminary seeding, since no scoring is made until all 24 competitors in any event have concluded their competition. From the entry lists the name of a competitor from each school is placed on each of three entry cards for each field event.

Each head judge of a field event has three cards for his event. Each card lists the turn, name, and school and the rules for that particular event (Form 5). The cards are listed as "Class C," etc., for competitive reasons only, and not for scoring purposes. (It would be unwise to have 24 boys vaulting or jumping, etc., at one time.)

As each card is completed, it is picked up by the field events scorer. He has a master scoring chart for each field event.

As the individual "class" cards for the field events are completed, the scorer of the field events enters the results on Form 6. This form has been made up before the day of the meet with each school's entries listed in alphabetical order. All the field scorer does is enter the distance or height, and, at the conclusion of the event when all data has been recorded, he places the

boys in rank order from first place to twenty-fourth place on the basis of their performances. It is then rushed to the head scorer who, in turn, allots the points for each individual and then each school. The use of the field events scorer saves the head scorer much valuable time.

Mechanics of Scoring the Meet. Finally, and what is perhaps most important to the competitors, schools, and spectators, are the questions "Who is ahead?" and "Who won the meet?" With the scoring details kept as outlined, a complete running score is available at any time, and the final score is ready within three minutes of the conclusion of the meet.

There are actually three scorers for the meet—the head scorer, his assistant and the field events tabulator. The head scorer is responsible for the accumulative scoring and for the final score. His assistant checks his tabulations for error immediately. The field scorer's duties have been indicated.

Duties of head scorer

The head scorer has a complete set of Finals Entry Cards (see Form 1), with all the necessary information included on it. As each race is completed a runner brings the finish cards, Form 3, to the head scorer. He resolves the order of finish into points and places the correct number of points after each competitor's name.

For example, in the Class C, Mile, the winner of first place would have eight points attached to his name and so on down the line to the boy in the last place who would get one point. After all three races have been scored, the head scorer can tally at the bottom of the Finals Entry Card the complete total number of points any school made in that event.

The head scorer's job is to set up his cumulative scoring chart so that a running score is kept. Using Form 7, he enters the event in the left-hand column above the word "totals" and carries the point score of each school across the card. He can then carry his totals down the card by adding the score of each event as it is tallied. It is suggested that he carry his "totals" figures in a different colored pencil so they will not be confused with the individual event figures.

For the field events, the head scorer takes the master field event score card (Form 6), enters the individual and then the school points. These totals are then placed on the large score card (Form 7) and added to each timer's total score.

The various events have not been printed on the large score card since experience has shown that the field events may be completed at different times. Because of this, they may be added to the cumulative score at any time.

Time Schedule for All Events.

The question that is invariably raised about a meet of this type is "How much time is required to complete all the events?" The time of events must be organized. To assist the referee, clerk of the course and starter, a time schedule is necessary (see p. 11). This schedule is adhered to rigidly.

As a matter of fact, the track events are always completed ahead of schedule with the pole vault usually the last event to be concluded. One of the secrets in keeping this schedule is to have an alert clerk of the course. He is the key person for getting the competitors on their marks. Another good move is to have all the boys in one event at the starting place of that event; i.e., all 24 runners ready at the start of the mile run and not just one class of competitors.

Suggestions for Organization. One of the problems on the day of the final meet is the organizing of coaches, trainers, teams, judges, officials, and marshals, and seeing that the field is kept clear of all unnecessary persons. This is necessary so that there will be little or no confusion in running off the events and so that spectators will get a good picture of the activity.

This is accomplished by assigning each of the eight teams a place across the field, opposite the main finish line. Unless he is competing, no boy should be out of this area. Coaches, trainers and managers are required to stay with their teams. Paper badges of different colors, indicating coaches, judges, officials, managers, assistants, and marshals, are printed and supplied to those who have need for them. Four to six marshals police the field, and anyone who is not in uniform or not wearing a badge is sent into the stands.

A quiet niche is essential for the scorer. Above the west stands at Edwards Fields, are two broadcasting booths, one for public address and one for radio. The scorer is placed in one of these booths; as a result he is not bothered by coaches, competitors or spectators.

A public address system is also essential. Since our scorer is adjacent to the public address outlet, information is readily and easily transmitted to the public. The public address announcer is given a

typewritten list of the names of every competitor, which have been taken from the regular forms.

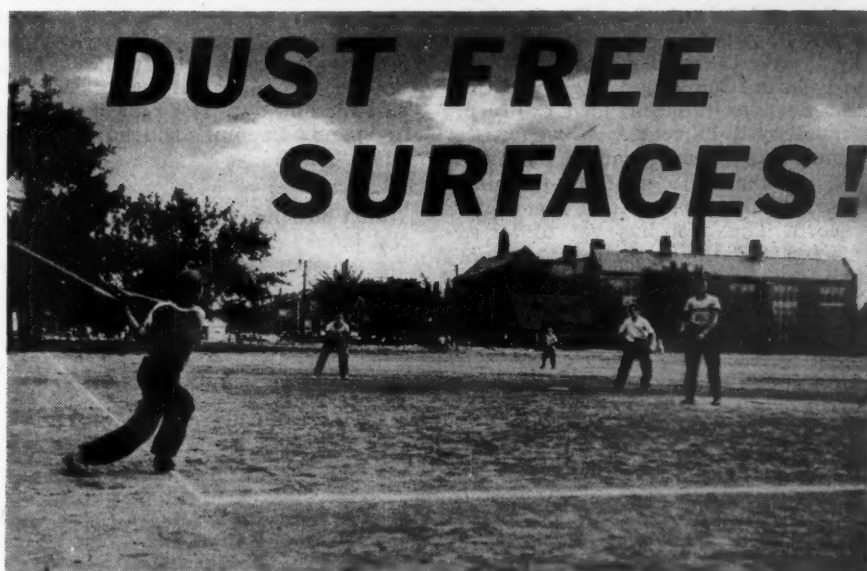
Use is also made of the field telephones through which the finish and the time of each event is phoned to the person handling the public address system. This information, plus that which he received before the race as to entries and lanes, can be given to spectators without waiting for it to come from the official scorer. All he needs to do then is write down the order of finish on the typed list as the results come in.

At the inception of this type of meet, the newspaper reporters were

at a loss as to how they could get all the results of the meet in time for their next day's edition. This problem was solved by having five typewritten copies made of all entries. One of these copies went to the public address room. The other four were used by a recorder.

As the results of each event were tabulated and recorded by the head scorer, they were given to the recorder. The recorder penciled in the results of each race by indicating the finishing place of each boy. At the conclusion of the meet the four newspaper reporters were given a copy of the complete results.

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Coaches' Corner



If you have something for this column send it to Scholastic Coach, "Coaches' Corner Dept.", 220 E. 42 St., New York 17, N. Y.

Our old friend, Dan Ferris of the A. A. U., is going to be a mighty awed gent when he hears the latest record claim from Lloyd "Tommy" Costar, dean of the Northern California schoolboy track coaches. Coach Costar claims one of his freshmen, Jack Miller, put the 12-lb. shot 509 ft. 7 in.—over 440 feet better than the world's record! The shot has yet to be extracted from the bottom of the school's well—reports Ralph Hensley of Chico High.

At a recent Boxing Writers Assn. dinner, one of the guests of honor was Nat Fleischer, publisher and editor of *Ring Magazine*. Fleischer, who has presented jewelled belts to every ring-champion in modern times, was introduced as "the man who has given 133 belts." He rose to his feet and delivered a bitter, slashing tirade against politicians in the fight business. Then he sat down. John Kieran, the next speaker, then rose and said: "That was Nat Fleischer—who now has given 134 belts."

And if George Halas of the Chicago Bears ever wrote a book on the mysteries of his T formation, couldn't you call it *Halas in Wonderland*?

Down Russellville, Ark., High School way, Coach Wallace Bailey lays claim to the greatest punter in football—halfback Harold Bartlett. Against Hot Springs last season, Bartlett averaged 62 yards on 12 kicks and punted out of bounds five times inside the opponents' 10-yard line. Against Benton, he averaged 57 yards for seven kicks, and against Subiaco, 55 yards on 11 kicks. His season's average was 48.4 yards per kick!

Coach Bailey (West Point '21) has quite a record himself. Over a 21-year coaching span at Russellville, he has won 150 and lost 49 in football, 81-24 in track, 292-101 in basketball, and 15-5 in golf—for a four-sport lifetime winning record of 75%.

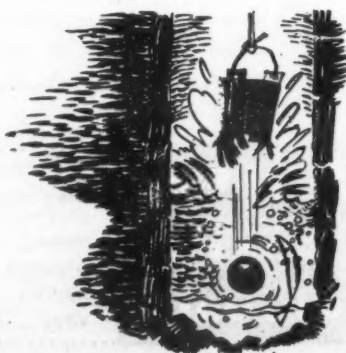
Nobody ever asks Bob Dille, the 6-3 Valparaiso U. deadeye, what he

does in his spare time. The poor guy hasn't any! Besides taking a full college course and playing basketball, he works 40 hours a week in a war plant. Here is how he does it: He works the midnight to 8 a.m. shift, then goes directly to school. He attends classes until noon, and then practices basketball for an hour. The rest of his time he spends sleeping. Did anybody say what "rest"?

Just how much latitude does an official have in stopping play and blowing whistles—queries A. H. Tripp of Nyack, N. Y. He asks us to clear up the following situation:

"Referee calls personal foul on Team B. Player A steps to foul line, receives ball from official who steps from circle, and sets for the shot. Somewhere between time he leaves free-throw lane and taking position outside play area, referee decides Team B spectators are too noisy. He blows whistle and runs into circle. But ball has already gone through net. Referee disallows shot, ruling it must be tried again. Far be it from me to squawk too loud and long about an official's judgment but when that error decides a championship game, I can be excused for getting somewhat hot under the collar."

Alas for the poor ref—he pulled a boner. If the crowd was too noisy, he should have stepped in front of the shooter much sooner; he may even have awarded Team A another free throw (technical). By giving the player the ball, he signified everything was in readiness for the shot. Once the ball left the player's hands,



the shot definitely counted. Anybody want to send in the \$64 question?

We know a pair of basketballers who have been teammates for 15 years on five different teams! They are Herm Schaefer and Curly Armstrong. Their partnership began in a Fort Wayne grade school and continued through high school. They went to Indiana U. together and played on the 1940 N.C.A.A. champions. After graduation, they joined the Fort Wayne pro team, played for two years, then signed up with Uncle Sam. Their Uncle refused to break up the beautiful friendship. So Herm and Curly are now playing ball with the Great Lakes Naval Training Station outfit—perhaps the greatest in the land.

Remember when parents used to shriek with horror upon spying little Oscar entering a pool room? Well, those days are gone forever. The old cue game is certainly getting more and more distingué. Now the courts have made this social reform official. We refer to the recent case of the State of New York versus James Catrano, jr., a 5½-year-old pool shark.

James wields a cue so dexterously that he beats many patrons of his father's pool parlor in Flushing, Queens (N.Y.). Probably out of spite, Catrano pere was dragged into court for violating a law prohibiting minors from loitering in pool rooms. Papa admitted that he entertains hopes of raising another Hoppe. The Magistrate, observing that Hoppe's playing had done him no harm, freed the Catranos. Jimmy is now back on his empty orange crate, beating the pants off his papa's customers.

Writes C. Leo Redmond, athletic director of Muskegon, Mich., High: "In answer to your claim that the 13 points after touchdown scored by Harold White constituted a record, I would like to point out an item featured by Ripley in his *Believe It or Not*. In a game against Hastings back in 1912, which Muskegon won 114-0, Heinie Bauer kicked 19 extra points. The kicks had to be made 15 yards in from the point where the ball crossed the goal line, or the scoring team could elect to kick out from behind the goal line and then make the try for point from where the ball was caught. Heinie, incidentally, still lives in Muskegon."

Whatever happened in Elkhart, Ind., on Jan. 19? Elkhart, with a 45-point-a-game average, beat Riley 5 to 4! According to our espionage agent, fans booed, the opposing players chatted amiably, the officials spent most of their time clearing debris off the floor, and a Riley player shared high scoring honors for Elkhart—he dropped a goal in the wrong basket. Will some kind Elkharter or Rileyite pass along the details.

The Lodi, N. J., High quintet coached by Stanley Piela has a new scoring play that is the talk of the state these days. Here is how the play worked against Fairlawn: Pepe (of Lodi) heaved the ball as if passing to a teammate. The ball, however, bounced off the head of a defensive player, soared 20 feet into the air and dropped into the basket! Spectators who were unaware of the finer points of basketball thought it was an accident.

The muse of art has had many woosers but none more unique than Mickey Walker, the boxing champ of the '20s. Since giving up wicked left hooks for gaudy rights, Mickey has been painting "genuine oil paintings." Last month he gave one of the most remarkable exhibits in the history of art.

Quoth Joe Williams, Scripps-Howard sportswriter: "The effect has been to encourage the youngest of my heirs, aged 7, to continue his wild experiments with colored crayons. Still, there is one thing the two have in common, meaning the maestro and the heir. They seem to make more sense than Picasso and Dali. When the maestro draws a leafless tree brooding in the flatlands, it doesn't suggest four ghosts in chiffon robes doing the Conga on an upended piece of stale rye bread. The heir is almost as grimly realistic."

Stanley Woodward, noted sports editor, added: "The clientele stood around, talking fights, submitting to radio broadcasts and newsreels, yet, withal, keeping their minds open in case anyone should mention art."

Of course, that noted connoisseur of the arts, Tony "Beer Barrel" Galento, was on hand. Adjusting his monocle firmly over his left eye, he drawled: "The perspective is distorted and the subordination of technic to composition is indubitably fatuous." It took him 80 minutes to memorize this.

All of Mickey's stuff is on sale at standard art prices—\$1,000 and up. Although he hasn't sold any as yet, Mickey remains above criticism. Meanwhile he is persuading his third mother-in-law to pose washing dishes.

Devotees of the science of numbers are pointing with fiendish glee at Notre Dame's basketball record. In their first 14 games, the Fighting Irish won numbers 1, 3, 5, 7, 9, 11, and 13; and lost games 2, 4, 6, 8, 10, 12, and 14!

One of the nicest names for a game we know of is Commando Tennis. It was passed along to us by Lt. (j.g.) Steve Ray, a former semi-pro baseball player who is now athletic officer aboard an airplane carrier. He tells us that Commando Tennis is a favorite deck game. It is merely volleyball played with a medicine ball. Out at sea you need the heavier ball to combat the strong winds. But can you imagine the boys setting up the ball and returning spiked shots!

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New Books on the Sport Shelf

POSTWAR PLANNING FOR SCHOOLS. Prepared by Horn Mfg. Co. Pp. 47. Illustrated. Distributed free.

COACHES and athletic directors who are planning new gym units will find many helpful suggestions in this 8½ by 12 manual.

The first section emphasizes general school planning. Each page contains a picture of a particularly well-built school or college, together with a neat, clear layout of the inside.

The latter part of the manual confines itself to gym construction. It shows the relative positioning of the fixtures, the floor markings and the seating plans of several model gyms. These plans, while not new, incorporate the best ideas in the Horn files. For your free copy, write to the Horn Mfg. Co., Fort Dodge, Iowa.

SPORTS: THEIR ORGANIZATION AND ADMINISTRATION. By William L. Hughes and Jesse F. Williams. Pp. 385. Illustrated. New York: A. S. Barnes & Co. \$4.

A HUGHES-WILLIAMS book is always welcome news to the nation's physical education and sports administrators. Dr. Hughes, who is acting chairman of the department of physical education at Teachers College, Columbia University, and Dr. Williams, professor of physical education at the University of North Carolina, have collaborated on several of the finest educational texts extant.

Their latest volume is squarely in the groove. It furnishes both a completely authentic basis for the sports program and a practical, concrete method for the conduct of sport in various institutions, at different age levels, and with respect to the needs of both sexes. Expressed concisely, the first part of the book presents a social philosophy—a point of view; the latter part offers an educational analysis—a way of procedure.

The philosophical aspects are covered under these chapter headings: Our Heritage of Sports, Sports in a Modern Democratic State, Health Supervision of Sports, and Sports in Elementary Schools, Secondary Schools, Colleges, Social Organization, and Industry.

Practical suggestions are given for Organization, The Sports Staff, Financing Sports, Purchase and Care of Equipment, Management, Rules and Regulations, Awards and Point Systems, Facilities, and Current Controversies.

The authors view all forms of athletics as integral parts of the activities of a department of physical education. This interaction has tended toward a

unification of two activities that were once divorced artificially by those who cared little for leisure time values and nothing for education.

The book is unusually well written, splendidly organized and, in a pedagogical sense, faultlessly projected. Its readers will gain a knowledge and understanding of the place of sports in American life and will discover how to conduct them so as to obtain the full measure of social values.

Naval Aviation Physical Training Manuals: FOOTBALL, pp. 244; SOCCER, pp. 182; MASS EXERCISE, GAMES, TESTS, pp. 235; THE SPORTS PROGRAM, pp. 209. Illustrated—photographs and drawings, \$2 each.

THE latest additions to the Naval Aviation sports series maintain the standard set by their predecessors, namely: *Boxing, Wrestling, Basketball and Hand-to-Hand Combat.*

Designed as teaching manuals for athletic officers, they offer complete courses of instruction. Each is wonderfully illustrated and concisely and clearly written.

The *Football* text covers the pedagogy of football, the foundation—stance, blocking, tackling, line play, end play, and backfield play; individual skills and team execution, which embraces the kicking, passing and running games; and the base of operations—offensive formations and plays, defensive formations, generalship, and signal systems.

The technical phases of Soccer are covered under these headings: facilities, gear and safety; warm-up periods, individual fundamentals, goalkeeper's skills, analysis of individual positions, game situations, and team offense and defense.

Mass Exercises, Games, Tests is divided into three main bodies. An introduction covers the need for physical condition, and organization and administration.

Part 2, on activities, embodies administration of the exercise program, mass exercises, adaptable games, relays and stunts. The final section is on appraisal and includes: physical appraisal, record systems and forms, analysis or rating procedures and special instruction.

The *Sports Program* covers the types of programs, their administration, gear and equipment for 11 major activities, organization for competition—including scheduling, coaching and officiating personnel, and rules; and administration of competition.

Each of these books is attractively bound and sells for \$2—a real buy. You may obtain your copy or copies from the U. S. Naval Institute, Annapolis, Md.

Plan for Overcrowded Basketball Classes

By Edward Abramowski

ORGANIZING large gym classes into competitive basketball units is one of the prize dilemmas of the physical educator, gym facilities being what they are. All too often, the instructor seizes upon the elimination tournament as an out.

He divides his class into teams, floors two of them and sidelines the rest. After a certain number of points, the losing team drops out and a new team, or two new teams, take the floor.

The tournament idea leaves much to be desired. Some boys never get an opportunity to play. Unless a time limit is also established, any of the early pairings may take all afternoon scoring a basket.

To hasten the turnover of players in the overcrowded gym, the writer has developed a plan which embodies all the fundamental features of basketball without the actual playing of it. In this plan the student utilizes these fundamental skills under game conditions:

1. Passing and timing.
2. Dribbling.
3. Shooting under fire.
4. Pivoting.
5. Following the ball.
6. Rebounding.
7. Defense (zone or man-to-man).
8. Fast breaking.

Organization

The procedure is as follows: First, have your class count off by sixes. Line up the 1s, 2s, and 3s at one end of the floor, and the 4s, 5s, and 6s at the other.

Nos. 1, 2, and 3 start working the ball in figure 8 fashion up the court. The trio on the other end (4, 5, 6) assume defensive positions, either man-to-man or zone. The ball-handlers try to penetrate the defense for a close-in shot. They work the ball until they: (a) sink a basket, (b) convert a foul shot, (c) toss the ball out of bounds, or (d) allow the defense to take it away from them.

The moment 1-2-3 relinquish the ball for any of these reasons, 4-5-6 immediately take the offensive and the next trio on the 1-2-3 side of the court assume the defense. The ex-ball-handlers fall in behind the 4-5-6 formation to await their turn on defense.

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ONE of the problems which received considerable attention at the recent National Federation meeting was the difficulty of maintaining adequate physical fitness programs with so many instructors and coaches entering the armed forces.

The Federation Council authorized the drafting of an appeal to the Manpower and Selective Service agencies for aid to those schools which are finding it increasingly difficult to maintain any kind of fitness activity. The appeal is based on the belief that the physical fitness activities of the high school are an essential part of pre-induction training and should receive consideration as such. This does not mean that exemption as a group is requested. Rather, it is an appeal to the federal authorities to definitely and unequivocally list these as essential wartime activities, so that local Selective Service boards will give the same consideration to this essential work as they are now permitted to give to other instruction which has a preferred rating.

This appeal was first presented to the Sub-Committee on Schools and Colleges, who adopted it as a part of their program. Upon the recommendation of this committee, the appeal was unanimously sanctioned by the National Physical Fitness Committee. A small committee was appointed to arrange a conference with the proper federal authorities so that the appeal might be effectively presented. The committee conferred with Watson B. Miller of the War Manpower Commission. At his suggestion, the National Federation Secretary drew up a formal report on the items discussed in the conference. This report and appeal is now being considered by the War Manpower Commission and by the Selective Service authorities.

Withholding Tax Decision: It is not necessary for high schools to withhold any taxes from sums paid to men such as athletic officials. These men are regarded as independent contractors except in certain situations where the man is employed professionally by a league such as a professional baseball or football organization. The ruling was made by the Federal Internal Revenue Department after a careful study of a National Federation appeal from an earlier November ruling, which would have made it necessary for schools to withhold the tax, and after considering Pennsylvania court rulings which had established school athletic officials as independent contractors in the application of the Pennsylvania employer liability laws.

Ohio: A new printed form for contracts between schools and athletic officials is being drafted which schools will be urged to use. The contract will

include proper statements to protect the school and the state association from liability in connection with various tax laws and employer liability laws.

The recently elected officers of the state association are President Lloyd M. Kaufman of Attica and Vice-President H. W. Hodson of Wilmington. A recently adopted ruling prohibits football practice between the end of Thanksgiving week and August 20. This rule was adopted by a vote of 278 to 94, with voting restricted to those schools which play football.

State Association Membership: In several southern and western states, Association membership has been greatly reduced, due primarily to the inability of some of the smaller schools to maintain any kind of athletic program. In a few cases, it is due to the failure of school administrators to realize that the maintenance of a strong statewide and nationwide organization is even more important in emergency times than in normal times.

In Oklahoma, at least 100 schools have dropped out of the state association. In Arkansas, the membership has been reduced by more than 30% and the casualties in Oregon are almost as great. New York has also suffered an appreciable reduction in number of members. In contrast, the central states have retained full membership and, in some cases, showed an increase.

New By-Laws: Article 1, Section 1.—In any interstate athletic contest, a pupil is eligible to compete only when his school is a member of the state athletic association of his home state and he complies with all eligibility rules of such association. If his school is not eligible to membership in its home state association, it must be an affiliated member—if the state has provision for such affiliation.

Article II, Section 2: No member school shall compete in any interstate tournament or meet in which three or more schools participate, nor in any interstate contest between two schools which involves a round trip exceeding 600 miles, unless such event has been sanctioned by all interested state associations through the National Federation.

Track and Field Guide: The war edition of the Track and Field Rules Book is in effect for the 1944 season. No new book will be printed. However, a small supplement will be available and copies of this supplement are now in the hands of the state high school association offices. It is a 16-page booklet, with the same dimensions as the rules book. It contains the new national honor roll, the 1943 state final meet results and other interesting data.

—H. V. PORTER

MARCH, 1944

31

Distance Running

(Continued from page 12)

regularity of the breathing rhythm.

As you work along with your boys, you will observe that many of them do not relax. Most of them know what you mean by the word, but they just don't seem to know how to go about it. I have a little trick that has worked well with my boys; it may help with yours. You might try it out yourself to get the feeling I describe.

First, line your boys up near chairs or benches. Tell them to start to sit down; then, as their knees bend, stop them before they touch the seat. Have them notice especially the looseness they feel in their arms, shoulders, and abdomen. Tell them that is the feeling they are to strive for while running.

In their early season work, keep reminding them of the desired loose, easy sag in the upper body. Have them strive for the same type of muscle sag in the legs. While thinking about such helpful things, they will have less time to become concerned about painful muscles and breathing troubles. In fact, they'll have fewer troubles.

I am not a strong advocate of daily rub-downs. In fact, I believe that many rub-downs, as I have seen them given by managers and coaches, might well be omitted. Some of them I consider more harmful than beneficial. I do think, however, that rub-downs have a value as a psychological stimulant. Correctly used, they can be aids to relaxation.

As you work toward securing an easier breathing rhythm and relaxation, be quick to praise signs of improvement. Praise can do more than you realize. It isn't hard to find some reason for approval, even of the weakest member of your squad. I don't advocate being saccharin about it, but you can recognize and point to what is worthy. It's mighty discouraging for the plodders to see others going through the same workout with apparent ease. Don't be too stingy with your encouragement.

Another problem most coaches must face early in the season is the boys' reluctance to practice in bad weather. We know they may have to run races in unfavorable weather. We know positively that when they enter the service they will have to carry on whatever the weather.

I encourage working out in the rain. I think you can get boys to like it, provided it isn't a torrential

Handles are important on GYM MATS

They can be a hazard and a weak spot or safe and strong as on Jim-Flex mats. Jim-Flex handles are doubled and redoubled, triple stitched and solidly attached to the mat wall with both sewing and riveting, backed up by canvas and leather reinforcing. They lie close to the mat out of harms way in spite of their ample size.

The same thorough safe construction is carried throughout Jim-Flex mats—platen process layer felt used (free from broken punching needles) closely tufted by hand with waxed twine, triple tied—extra strong covers—square side walls.

Absolute satisfaction guaranteed. Sold direct to you at attractive prices.

Send for catalog of mats, (all types),
Boxing rings, Etc.

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SPORTS EQUIPMENT CO.
366 MARQUETTE • FOND DU LAC, WIS.



SCHOLASTIC COACH MASTER COUPON

After checking carefully items desired, this coupon may be sent directly to Scholastic Coach advertising department, 220 East 42nd Street, New York 17, N. Y., from which point the advertiser will be notified of the request.

ALCOHOL EDUCATION

- ☐ Poster, Six Famous Coaches on Rule No. 1 How many?

AMERICAN AIRLINES

(Inside Back Cover)

- ☐ Enclosed find \$1 for Air Age Picture Charts & Book

AMERICAN HAIR & FELT (27)

- ☐ Names of Firms who can supply Ozite-Filled Mats

ATLAS ATH. EQUIP. (30)

- ☐ Wall Chart on Self Defense
☐ Athletic Catalog

A. S. BARNES (28)

- ☐ Sports Booklist

CHAMPION KNITWEAR (29)

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- ☐ All-Star Basketball Rating and Forecast
☐ Basketball Year Book

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EAGLE METALART (2)

- ☐ Catalog on Sport Emblems, Medals, Cups, Trophies, Badges

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- ☐ Sports Catalog

GRISWOLD & NISSEN (2)

- ☐ Booklet, "Tips on Trampolining"

HILLERICH & BRADSBY (2)

- ☐ Catalog

HORN MFG. CO.

- ☐ Book, "Postwar Planning for Schools" (review on p. 28)

HUNTINGTON LABS. (3)

- ☐ Seal-O-San "Coaches Digest"

KAHNFAST ATHLETIC FABRICS (27)

- See ad for Nearest Uniform Maker

LINEN THREAD

- (Inside Front Cover)
☐ Catalog on Sports Nets

McGRAW-HILL (30)

- ☐ Sports Booklist

(Numbers in parentheses denote page on which advertisement may be found)

**ON PAGE 32 OPPOSITE THIS SPACE ARE
OTHER LISTINGS AND FORM FOR SIGNATURE**

RIFLE-TENNIS TOURNAMENTS

SCHOLASTIC INTRAMURAL RIFLE TOURNAMENTS

220 E. 42 St., New York 17, N. Y.

Please enroll my school and send the awards, drawchart and tournament instructions. We will have a boys' tournament _____; girls' tournament _____ starting date _____

My name _____ Faculty position _____

I am a qualified N.R.A. instructor _____ (check). I wish to become a qualified instructor. Please send me the training course outline and study manual _____ (check). I would appreciate help from the National Rifle Association in finding a properly qualified instructor in my community _____ (check).

Send information on how rifles may be obtained _____

Name of School _____ City _____ State _____

Enrollment of School: Boys _____ Girls _____

SCHOLASTIC TENNIS TOURNAMENTS, 220 East 42 St., New York, 17, N. Y.

Please register my school for the following tournaments:

☐ BOYS' SINGLES ☐ GIRLS' SINGLES ☐ BOYS' DOUBLES ☐ GIRLS' DOUBLES

School enrollment _____ Send awards by _____

Name _____ Position _____

School _____

Street _____

City _____ State _____

SCHOLASTIC COACH MASTER COUPON

(See page 31 for other listings)

(Numbers in parentheses denote page on which advertisement may be found)

FRED MEDART (29)

☐ Book, "Physical Training, Practical Suggestions for the Instructor"

SOLVAY SALES (25)

☐ Folder, "For Cleaner, Weedless, Dust-Free Play Areas"

☐ Physical Fitness

☐ Basketball by Everett Dean and Bill Anderson Limited Quantity for Squads

NATIONAL SPORTS (31)

☐ Catalogs: Bases, Mats, Rings, Training Bags, Wall Pads, Pad Covers

SPALDING & BROS. (1)

☐ Catalog

VESTAL CHEMICAL (24)

☐ Information

PENNA SALT (15)

☐ Sample of "Tilite"

U. S. RUBBER (4)

☐ Football (Passing and Kicking) by Frank Leahy

VOIT RUBBER (21)

☐ Catalog on Rubber Covered Athletic Balls and Equipment

PETERSEN & CO. (2)

☐ Catalog on Gym Mats, Wrestling Mats, Boxing Rings, Mat Covers and Prone Shooting Mats

☐ Baseball by Frank Frisch

☐ Outdoor Sports and Games (Tennis, Badminton, Swimming, Camping, etc.) by Don Budge and others

☐ Illustrated Price List

REMINGTON ARMS (19)

☐ Instructor's Manual on operation of a Rifle Club

☐ Football (Blocking, Tackling, Ball-Carrying) by Frank Leahy

WILSON (13)

☐ Your copy of "The Human Machine at War"

☐ Catalog

NAME _____ POSITION _____

(Principal, coach, athletic director, physical director)

SCHOOL _____ ENROLLMENT _____

CITY _____ STATE _____

No coupon honored unless position is stated

March, 1944

downpour. If you have ever run in the rain yourself, you know that you have less breathing trouble on rainy days. If the footing is reasonably secure, you can work harder with less effort than is required on a bright day.

Prepare the boys properly and you can get them to anticipate the pleasure of running under cool rain. I have seen my own boys really pleased to see rain falling for an important state meet. While the other contestants were growling about the sloppy course, my boys grinned and went to work. As a result of a little psychology and some previous work in the rain they once upset a highly favored opponent and went on to win a state title.

Handicap work is also a good psychological aid, as well as an incentive for speed. Once you've become acquainted with your boys, you have a pretty fair idea of their comparative speeds. By planning your handicaps shrewdly, you can give poor runners the sensation of being up there with your good men at the finish. It's a strange feeling for your weaklings to find themselves actually forcing your stars to give all they have to get by. The boys without natural ability are not used to being out in front.

When you hear one of your boys say he didn't know what to do when he found himself leading well along in a race, don't think he's joking. A situation like that can have a strange effect. It may stimulate him to run far better than he thinks he can, or it may tighten him up so badly that he won't be able to run a lick.

... and Pass the Ammunition

PRAISE the Lord there may be plenty of ammunition for school rifle teams this year. With the Army releasing materials and facilities for the manufacture of ammunition for civilians, releases for the first quarter of 1944 are in excess of the total release for the entire year of 1943 under the Gabrielson program.

The amount of future releases has not been revealed, but manufacturers are expecting to make enough civilian ammunition to take care of bona fide needs this fall. There are still obstacles to be overcome, but the situation is becoming brighter.

Much of the new ammunition stock will go to the 17-state area between the Mississippi and the Rockies to help safeguard livestock and crops. None of the cartridges will reach shooting galleries or sportsmen indulging in skeet or trapshooting. Since school rifle shooting has always been high on the priority list, there is every reason to believe a good supply of the ammunition will be diverted to those channels.

"Here's a great new way to teach aviation!"



6 Big Air Age Picture Charts for only 50¢ plus postage

HERE'S an easy, fascinating way to increase your students' knowledge of air transportation—a way designed especially for Junior and Senior High School boys and girls interested in a future in aviation!

These big Air Age Picture Charts, each profusely illustrated and packed with information about a different phase of aviation, make excellent instruction material for boys and girls who are interested in air transportation. They'll prove extremely helpful in preparing them for a career in the Air Age. And although they're worth a lot more, all six charts are being offered for only 50¢!

This is a rare opportunity. There's nothing else like these charts in print. They're practically a complete aviation course in themselves. So right now, while it's on your mind, take advantage of this offer. Just use the coupon at right.

***IMMEDIATE DELIVERY—SEND COUPON NOW!**

• Each chart is nearly a yard long and almost two feet high!

• They deal with the Air Ocean, Meteorology, Airplane and Aerodynamics (The Airplane and How It Flies), Airline Operations,

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• They're printed in 3 beautiful colors!

• They're interesting, informative and will look great on the walls in your classroom!

American Airlines, Inc., Dept. C-3,
100 East 42nd Street
New York 17, N. Y.

Enclosed is 50¢ plus 10¢ for postage and handling (cash or money order—NO STAMPS, PLEASE). Kindly forward a set* of AIR AGE PICTURE CHARTS to:

Name _____
Student or Teacher (indicate which) _____
Address _____ Zone _____ State _____
City _____
Name of School _____

*Individual charts may be purchased by mail from American Airlines at the address above for 10¢ each, plus 10¢ for postage and handling.

THE NATIONAL AND INTERNATIONAL **AMERICAN AIRLINES Inc.** ROUTE OF THE FLAGSHIPS



Soon after the Basketball Season ends, the **IVORY SYSTEM** representatives will be out on the road again, bringing I. S. Service to your school.

We haven't as many roadmen as we had in former years (you know where they are) but those that are left are striving valiantly to carry on the **IVORY SYSTEM** tradition of prompt, courteous and efficient service.

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